(Aug) 2 Aug 6. 1857

Botanic Garden Melbourne
6. June 1854.

My dear Sir

Dr Graham called on me some while ago to receive the specific names to some specimens of plants, which he gathered about the Ballarat goldfields and as he is going now back to your fine country I thought it to be an agreeable opportunity to establish if possible an intercourse with you, which, perhaps of but little advantage to you, will be as delightful as instructive to me.

You will have perhaps surprised to see some of your already described Western Australian Compositae reappears with new names and new descriptions in the Linnaea of 1853. This was partly to my not receiving in time your valuable remarks and partly to premature publication. Already as early 1847 I commenced describing Australian plants when staying at Adelaide

but unfortunately the main set of my manuscripts was lost 1857 on the way home in the wreck of the „Sir Rob. Peel" on the Cape coast and appointed here only since about one year I have been not able yet to repair all the loss from my scattered notes.

It would be extremely gratifying to me, dear Sir, if you would send me a collection of North American plants, such as you can spare, for which I shall be happy to return <u>at once</u> an equal number of Australian plants (with names and loc. natal.) Of seeds I shall have also constantly a lot ready for exchange, should you be pleased to send us some for our garden. We have really but very little from N. A.

Since now an almost regular trade exists with the N. A. harbours I think there will be but little difficulty in realising the object proposed.

Allow me, dear Sir, to subscribe myself as one of your friends and admirers.

Ferd Mueller.

Prof Dr. Asa Gray.

Professor Asa Gray M.D. F.L.S.
&c &c &c.

Recd. Pomr.
by. Dr Graham.

~~Boston~~
or Cambridge

(Recd) May 6/57 / Melbourne 24. Jan. 1857.

Sir

A few years ago I had the honor of addressing you through a medical gentleman of the united states, inquiring, whether you were inclined to enter into an exchange of plants, particularly dried specimens, and seeds with the establishment under my care. Presuming that the letter was lost or not delivered, I beg to repeat my offer anew, and may state, that I should be able to get at least 1000 Supr. dried plants ready for you within this year, if such as will as many kind of seeds were acceptable to you for an equal number of yours. Our herbarium is more devoid of North American plants, than of any others; and perhaps you are in the same position with regard to yours. — I think about the safest way of sending would be ~~through~~ via London, but this will entirely depend on your suggestions or arrangements.

Permit me to express in conclusion my best wishes for your welfare and my admiration for your multifarious excellent contributions for our favourite science.

Most obediently

Ferd. Mueller.

Dr. Asa Gray,
&c &c &c

Dr. Asa Gray
Prof of Botany &c &c
Cambridge University
Boston

Melbourne Bot Garden
15. Oct. 1857

My dear Dr. Asa Gray

I have but a few spare moments left before the close of the mail, to answer to your very kind lines just arrived through Mr Will. Hooker's care. I will do my best to furnish sets of Australian specimens speedily for your N. American lovers of Botany and will review my Campaign Collection carefully for a set for your own herbarium. For

in whose hands could
the better be placed?

Accept, dear Sir,
the sentiments of
my admiration for
you and likewise
my best wishes
for your welfare.

Most obediently
yours
Geo. Müller.

return at an early period an ample equivalent.

Humbly yours
Ferd. Mueller.

The Captain of the Red Jacket has undertaken to ship the box from Liverpool with the first Boston steamer, but I beg to recommend, to instruct some party there to enquire, whether such has been duly the case.

Melbourne Bot Garden
8. March 1858.

My dear Prof. Asa Gray.
I beg to acquaint you by these lines, that I forward this day a box with specimens & seeds divided into 10 collections by the famous clipper „Red Jacket" to ~~the Jos. Agent in London~~ Liverpool, to be there forwarded to you, as seldom or never a direct opportunity of sending to you offers itself. The seeds amount to 2340 papers, the specimens to about 1350. To these have been added some pamphlets. I avail myself gratefully of your kind promise to distribute all these things over North America, praying you with retain the principal collection for your own estab-

blishment. It would be extremely pleasant to receive an equivalent back at an early period from those establishments, to which you think proper to send them. I refrain from sending a list of what we require, for our garden is yet so young & so poor, that hardly any seeds, native of North America, will come amiss. But I may state, that seeds of your native trees & shrubs would be particularly desirable, for instance the acorns of all your oaks. The seeds which I buy to offer are all collected within the last months & with a few exceptions Australian ones.

I expect much benefit from sharing in the annual interchange of seeds, which no doubt exists in the North American Gardens.—

It was my intention to have selected a set of Compositae for you from my Normal Collection, but my time has been lately fully absorbed by duties as Director of this garden. I will however bear your former requests in mind.

Should any North American gardener or Botanist, who can not be supplied from what I send on this occasion feel inclined to exchange seeds with this establishment, I would suggest that collections were made up for me, and I will pledge myself to

Melbourne botanic garden
15 June 1858

Much honored Sir

Allow me to inform you again, that I forwarded about the middle of March this year a consignment of seeds & specimens to you, shipped per "Red Jacket" to Liverpool in behalf of this Government, to be exchanged for seeds & specimens (particularly the forms of plants indigenous to the United States. The box contained 2340 papers of seeds, divided into the collections

plants.

Pardon the hasty compilation of this note & accept the best wishes & the fullest veneration from your humble

Frd. Mueller.
M.D., PhD.

Prof. Asa Gray, M.D.
&c &c.

& 1350 specimens also divided into 10 lots, besides some pamphlets &c.

The Capt. of the Med packet kindly undertook to forward the box on to Boston, but I have over and over experienced that Cases with articles like the above are when opened at the Custom houses are more or less emptied of their contents, that I feel very anxious to hear of the safe arrival. — We endeavoured unsuccessfully to introduce the noble American oaks by acorns, & pines by seeds, but never succeeded. If you kindly could order some packed for us, I would suggest to have them packed in dry sand, stratum over stratum in a stout box.

I shall take an early opportunity of again communicating with you, and have some books in readiness for you, as well as

as I can hunt up.

I enclose the male & female plant of Dr Brookes Kaunia Tasmanica. Our mutual friend evidently ~~has~~ is not aware of the plant being diœcious, altho' I have when referring it in 1854 (Phil. Transact. vol I (1854–1855) p. 45. to Autumnalis as Autumn. publication) gave that character. In Sir Will. Brookes reprint the sectional character, published by me is omitted. It is as follows: Aitina:

4 Scales of involucre radiating, heads of fertile plant with several rows of female flowers in circumference and with hermaphrodite ones in the centre. Heads of the sterile plants

Melbourne Bot. Gard.
Garden, 18 Oct. 58.

My dear Prof. Asa Gray.

I beg to express my gratitude for your generosity of sending me so many valuable and highly interesting publications, doubly esteemed as coming out of your hands. I trust young Australia will imitate the noble zeal of your vigorous nation to promote with the same freshness of life the prosecution of science. The "Red Jacket" has

reached a day or two ago this post again, but just as the mail is leaving I am unable to learn more than that my box destined for you did not share the fate of some other part of the Cargo, which was consumed by fire.

I shall lay regularly plants & pamphlets as well for yourself as for the Smithsonian Institute and for your friend Asa, and will send a consignment with every Boston Vessel returning to your shores direct.

Pray my dear Prof Asa Gray, do not distress you about a return so very soon but when even without extra-labour & quite conveniently to yourself it can be done your U. S. Lithographics are magnificent. I wished we could equally well illustrate here. The seeds kindly sent this time arrived in excellent order and are in the growing ground now.

I will gladly send such Australian Compositae to you

with only hermaphrodite flowers, a few rarely fertile. Pappus at the extremity clavellate, with exception of that of the female flowers which is not thickened. I think Raoulia is fully referable to Antennaria

The mail just closing, decides me, to write fully, this time, all my correspondence being thrown on the Eastern day in consequence of a large exhibition of the Horticultural Society here yesterday

With the sincerest wishes for your welfare
your very humble Jas Mackay

Melbourne botanical and zoological
Garden, 10. febr. 1859.

My dear Professor Asa Gray.

Through a friend of the accomplished Mr M'Gowan, to whom we owe the extension of the telegraphic wires over this country, an opportunity is afforded me of sending you a parcel of seeds (fresh collected) and a few pamphlets for yourself, the worthy Professor, Dr Engelman and other of your bot. friends. I regret that this contribution is so very insignificant, but the mainlot of seeds procured in the interior this season has not yet arrived and several publications are not yet completed or copies were at this moment not at my command. I will send you the 4th No of my fragments, which has been in the printers hands since several months, by the first opportunity & the several other Numbers will soon follow, as I have the manuscript prepared. Amongst the novelties to be described is a spec of Encephalartos, a new Cycadeous Anoptera, of which genus only hitherto one sp. was known from Tasmania, whilst A. macrosperma occurs on the high mountains of E. Australia.

I sincerely hope, that the large box with specimens, seeds and pamphlets was at last received by you. I wrote about it to Liverpool several times, but have ascertained hitherto nothing about its fate. It is a great disadvantage, that we have no direct opportunity of forwarding from here to Boston, otherwise my communications would be more frequent. However I will not be deterred by one failure and shall send you again a share of our bot. duplicates gathered

this season.

That I received safely a few months ago the parcel with pamphlets, the flora of N. Australia, the seeds and other articles, which you and Dr. Torrey were so very kind to forward, I have duly acknowledged at the next following mail.

With my sincerest regards I remain,
my dear Sir,
your very much attached
Frd. Muellr

The Polyglot News Letter.

A SUMMARY FOR TRANSMISSION TO EUROPE.

(ENGLISH EDITION.)

PRICE SIXPENCE. WEIGHT UNDER HALF AN OUNCE.

THE GOUTY-STEM TREE,

NEAR THE "DOME," ON THE RIVER VICTORIA, N. W. AUSTRALIA.

PRINTED AND PUBLISHED FOR THE PROPRIETORS, AT THE "PUNCH" OFFICE, MELBOURNE.

DECEMBER, 1858.

Melbourne bot. Good
Garden, 16. Apr 59.

My dear Professor
Asa Gray.

I can assure you, that your kind letter dated 28 Oct, which however only a few days ago came into my hands has given me very much joy, doubly so because I learnt of the safe arrival of my first botanical consignment to the U.S. Herbarium, which you were so friendly to contribute to this establishment arrived in best order, & I have for this valuable lot to express my heartfelt gratitude.

I am just in a flood of work connected with this rather large department, therefore I must now part from you with a hasty but most hearty farewell.

Ferd. Mueller.

Ship Alexander
to New York!

By the Alexander's which sailed for New York a few days ago I forwarded under care of a friend 8 copies of my fragments No 1-4; 6 copies of my report on Mr Babbage's plants & 1 Gardner's report. If there are yet any of your noble institutions, which require these documents pray let me know. The Golconda's is advertised to sail for Boston on the 2 May. With her I shall hazard the pleasure to send you No 5 of my fragments, perhaps also No 6 & some odds & ends, besides an other large consignment of dried specimens and seeds, containing a fine lot of rarities & novelties from the Darling collected this season.

Pray receive my sincere thanks for your devoting so much of your valuable time for initiating the desired botanical intercourse of this establishment with your country; but pray let it not break in on your own more important work.

men who requires
any of my humble
works or if there is
any institution that
would like to possess
them, pray let me know
I will think of asking
to your carpologic col-
lection.

Ever with veneration
& attachment
yours
Fred Muller

Kind regards to the
excellent Torrey, Engelmann
& Sullivant

Melbourne Bot. &
Zoology. Gardens
16 May 59.

Dear Professor Asa Gray.

I do not wish that
the mail shall leave
without acknowledging
the arrival of the
Isabella's by which
you were so very kind
to forward to me a
large box, which however
is not yet in my hands,
I pray accept my kindest
thanks for the contents
of it & for your con-
tinued generosity. There
was a good opportunity
of making a sending
to you by the 'Golconda',
of which I have not

failed to avail myself moreover as the obliging commander of that vessel Capt Emerson not can would accept freight for the sending.

The box I sent contains 1 coll of dried specimens = about 480 species mostly rare species from the Darling, some of them only discovered this season — 1 coll. 390 species 1 coll 220 spec. 1 coll 200 sp and 4 coll each about 100 spec = total about 1200 specimens. Further 4 coll seeds respectively 328, 310, 321 & 256 all well ripened & fresh. I put also some printings in & forwarded a few weeks ago, other printings by a friend who happened to send things by an American vessel to New York Capt Emerson had the kindness of taking also care of a small parcel containing some copies of V fragmenta for distribution to you. The box was closed by the tinsmith before I could get them from the printer.

I am in possession of your excellent little work, how plants grow?. If there is any of your scientific

Melbourne bot &
zoolog. Garden,
17 June 59.

My dear Prof Asa Gray.

I beg to acknowledge the arrival of the specimens & seeds, which so kindly forwarded & which have given me the greatest pleasure. The specimens particularly will, — from the hands of so many celebrated Botanists — be of great value to our collections, which are excessively poor in N. American plants. With your, dear Sir, allow me to suggest, that any future sending you

may favor me with should be packed in a hermetically closed case, because for instance in your last collection many specimens were greatly mildewed, which is a pity when one thinks how beautiful they must have been before damaged.

I have no doubt you received by this time my consignments of books, plants & seeds, which I forwarded some months ago.

With sincerest regard

dear Professor

your very humble & obliged

Geo Macdougall

Melbourne Bot. Gardens
13. July 1859

My dear Prof Walpy.

I reply to your kind letter dated 18 March 59 I have to inform you that both your kind contributions safely arrived & were most gratefully received, and that I shall be exceedingly glad to continue the interchange of opinions seeds, carpological collections & botanical publications

must with the uncloses of your noble Oak & Pine-forests. Will you be so friendly to allow me to suggest, that the ripe & air dry acorns & pine seeds would best stand the long way to us in dear coal dust, and that it never will be safe to forward an a long seaway Dicotyledonous or book except in hermetically sealed tin-cases. The other day the contents of a box received from Dr Sonder with books & seeds were totally spoilt not even honorary diplomas were spared up in wax-paper excepted. Your yours with the warmest regards for Dr Sonder

with so liberal and enlightened Gentlemen as the North American Naturalists.

There was sent some time ago a box with specimens, seeds & pamphlets by the American Clipper whose Captain generously and patriotically took the Consignment free of expense. In this way the American Captains are far more obliging than others. The cost must at the end be paid.

I am told that there is a powerfull grass in North America, which attracts much attention on account of its constant verdure & exceedingly prolific growth and which I am told would be of great service to these colonies chiefly in barren localities exposed to droughts. Could it be the Lratochloa? Any good economical seeds I would much be gratified to receive for the more general benefit of my fellow colonists.

Thanking thanks for your very kind & obliging promise to provide my establish

come through Dr
Maradam.

With my sincerest
admiration & regard
I remain, my very
dear Professor,
Your attached
Frd. Mueller

There is great de-
mand here for Podo-
phyllum as a
medicinal herb.
Could you favor me
with a few seeds?

Melbourne Bot.
Royal Gardens
17. Nov. 89

My dear Professor
Gray.

I was equally de-
lighted with your
kind letter and your
valuable contribution
of plants & seeds per
"Dunbriss" & am espe-
cially indebted to you
for the singular
Utricularia. The nume-
rous publication, all
of depth & clearness, tes-
tify to the great assi-
duity and profound
knowledge, which you
display, and I congra-
tulate myself that

you condescended
to enter with me
in a so frequent
intercourse of exchange
& correspondence.
I hope to be able
to make up at the
end of the season
(Febr. or March) a
large collection of
dried specimens
& seeds. Meanwhile
also the first vol.
(containing Tasmanian
flora) of the »Plants
of Victoria« & also of
the fragments will
be out, & my report
on the garden and
also on Mr Stuart's

plants from the
N.W. interior of
South Australia.
The phil. Institute begs to offer
its most grateful
acknowledgement
to the academy for
the liberal donation
of your volumes,
so replete with im-
portant information,
& only regrets, that
our young society is
not yet strong enough
to offer an equivalent
acceptable to the
scientific men of
your great state.
The official ack-
nowledgement will

Eucalypti, just come
With my wish
some admiration
& attachment,
my dear Dr. Gray,
your humble
Ferd. Mueller

The Cereus gigantea
has grown beautifully
& is now in the posse-
ssion of many gardens.

Melbourne Bot. Govt
Garden
16. May 1861.

My dear Prof. Gray.

My principle reason for
addressing you today con-
sists in bringing under
your notice, that a
box with dried plants
seeds & the last num-
bers of my Fragmenta
also some sheets of
my flora & plates &c
was forwarded to you
under care of Capt
Cate, Commander of
the Ship Black
Sea bound in a few

(from Sydney)

days for New Bedford
I regret only, that
the collection of plants
is not more worthy
of your acceptance, —
It will however
ere long be followed,
si fata velint, by
a more extensive one
Always full of
innumerable wishes for
this establishment,
I remain big to solicit,
that you will kindly
send me, (N.A. Rubi) when in a
dormant state, of
such species as are
close at hand. They
will be both useful
& ornamental.

Dr Shelly some
time since in one of
his ingenious & learned
letters when with ad-
miration referring to
you, says of you:
botanicorum facile
princeps, a judgment
in which I fully concur,
& which you fully are
entitled to after Nuttall's
labours & discoveries.

A most excellent &
kind friend of mine,
Mr Hooper, a Merc-
hant of Melbourne
now permanently return-
ing to the U. States,
has kindly taken charge
of the elaboration of
the extratropical

I am highly gratified
that the hurry I picked up
just at the mails dr.
gathered a few Cuscuta-
fragments for the worthy
Closed & accurate
Dr Engelmann.

Can I serve your
Academies in any way?
The first vol. of my
explorations of Victoria's
quarto with illustrations
will be distributed by
Sarnums to the prin-
cipal Academies &
Libraries abroad. It
finished the Thalami-
flora on 180 pages.

Even with rep regard
my very vrs &c
yours affectionately
J. D. Hooker

Melbourne bot. &
Sydney
25. Aug. 1860.

My dear Prof. Asa Gray.
The parcel which the
obliging Commander
of the "Lucknow" took
care of reached me safely
& I am under great
obligation to you for
so interesting & valu-
able addition to our
herbarium, for which
in due time I shall
endeavour to reci-
procate.

I observe that you
did not open the
parcels before delivering them: have a

package of specimens of Ranunculus Pusbhii, of Carex & of Gramineae & undoubtedly Cyperoideae intended for yourself came to Australia from whence they shall be returned at the very first opportunity of sending them safely back. Perhaps I may keep them, until my next consignment arrives, which I will make up in the beginning of 1861 (si fata velint), when I hope to have returned from two exploits I intend making for the sake of geographically & physiologically exploring a hitherto untrodden part of our territory. I am much obliged for your friendly information on the Sebizia dactyloides, and would be very glad for roots of it, which would well travel in a small glass case. May possibly any travelling you

Your seeds arrived in most excellent condition! For the botanical printings

Is there any possibility of introducing the Weevil from N. America?

Melbourne Bot. Gardens
24. Jan 61.

My very dear Professor.

I take the earliest opportunity of informing you, that I have through a friend, Mr Stephen of Geelong, forwarded to you the pairs of plants, which accidentally came into my hands, but were designed for your herbarium. He left by the Lord Raglan's a few weeks ago & with our craft after his arrival in England

the Atlantic

He has also charge of a few papers for you, I think also of the report on the Werdkin plants, in which I had an opportunity of rendering especially to your admirable work on the U.S. Explor. Expd.

My report, detailing the results, both geographical & physiological of my last alpine journey will probably by this mail go to you. That I found a new genus of Vaccinieae, i.e. Wittoteinia vaccinioides, will interest you. When returning from my autumnal journey I shall carry the root amount of specimens I have to give away, & certainly I will pay thus my debt to the excellent men, who so liberally have enriched our public herbarium with N. American species.

Can I serve you, your scientific views & wishes in any way, pray command my services.

Yours ever affectly
Jno. Muir

Would it be possible
for you to cause
the following
advertisement to
be ~~sent~~ inserted in a
Boston & New York
journal? I am
requested as Vice
President of our
Colonization Society
to attend to the
arrangement.

With the sincerest
feelings for your
health & happiness
dear Dr Gray
yours
Fred Douglass

Melbourne Cottage
Regent Garden
24. Jan 62

My dear Prof Gray.

I can assure you, it
is with feelings of
the utmost sympathy
that I look now
to your country &
think of you, well
imagining how much
the terrors of the
war must interrupt
the labours of the
philanthropic philo-
sopher & must with-
draw from him the

amplitude of support.
My principle reason
for writing this
day consists in
the profound desire
of expressing my
sympathy for you,
then also to learn,
what sort you
would desire to be
adopted for sending such
botanical specimens
as I am now pre-
paring for you &
your botanical friends,
after your generosity
we have so greatly
enjoyed here in
adding to our collection

I overlooked, that
you brought Nhy-
tidanda (Sendalan-
gium inhi) to Mau-
ritius before I found
the plant myself.
I think I mentioned
to you before, that
I discovered Bryonia
here also.
I have just finished
the 1 vol of my
plants of Victoria
and the second of
the fragmenta. Both
will be sent to you
as soon as I learn
that I can do so
with safety.

Melbourne
Bot. Garden
25/3/83.

Dear Professor Gray.

It was quite touching to my mind to receive your last note, indicating the transmission of a new and highly valuable consignment of dry plants for our herbarium. Under ordinary circumstances it would have been a most gratifying gift, but it becomes one of incalculable value when it is considered, under what enormous difficulties and anxiety

Allow me to remark that, as I have pointed out in my report on the plants of the Burdekin Expedition, carpological notes of, I think, considerable importance distinguish the two genera. Echites scabra has upon these to be removed from Lyonsia to Parsonsia. You have probably or ferhs of these genera yet for comparison.

I am just finishing the 3rd vol of the Fragmenta. My flora is now out of hand under the care of a friend, Mr Osborne, in April last I hope you received it and that it met with your kind appreciation & learned judgment.

Ever in sincere attachment
yours for Melbn

a man of science has
now to persue his
path in your country.
By arts like these you
have shown yourself
again as one of the
worthiest sons of science.
May peace soon be re-
stored to your suffering
country. With it science
will again doubly to
charms!

At the eve of my
departure to Europe
whence I go for one
year, I hope to arrange
for the transmission
of an other consign-
ment of plants to you.
Should I in the many-
fold engagements in my
department be unable
to send them, not assured
that after my return
there will be commercial
attendé to, especially
as the duplicates will
be meanwhile sorted
& much in the interval
will arrive from ~~home~~
our collector in W. C.
Australia.

You have also been
so kind to send me
some of your most valued
& ingenious pub-
lications, for which I
have likewise to tender
my best thanks. Those
for Dr Hooker have been
forwarded by the mail.
You are inclined to have
the characters of Lycopodia
& Darwinia on the
structure of the flower.

for whose future I entertain such solicitude. I fear, I shall not be able to write to him by this mail, but will do so by the next.

N. S. Australia, among the virgin forests about Rockingham Bay promise to yield us many additions to the Australian flora. I have from thence Musa, Elaeagnus, Drypetes, Jugania, Ligustrum, Calophyllum, Tinomine, Dysoxylum, Argophyllum, Garcinia, Tetracera, Alophylum, Jovania &c &c besides many rare marsh weeds. Prof Brewer has been wandering in the Sierra Nevada, your most affectionate friend

Malbourne Bot Garden, 25/4/65

I have no doubt, dear Prof Gray, that you deem me most ungrateful & most forgetful of my obligations, because I have been so long silent towards you & not even forwarded any collections. I can little say to vindicate myself beyond that I have been kept excessively busy in my large departments by extra duties of varied kinds & since Christmas last in endeavouring to aid the Ladies, in sending out their relief expedition after poor Leichhardt

So it has been only lately, that I forwarded through a friend an employee of this garden to you a parcel with about 500 dry plants, mainly to show my good will. I see however the prospect of spending the entire a good deal of my time in my Museum & distributing duplicates from thence; also I have to send you some of my recent publications. The 5 vols of the Fragmenta is commenced & I am about shipping the Compositae for Bentham's 4th volume. Your horrid war discourages to some extent intercourse of all kinds, but I will send my collections via London for safety's sake. I have now planted out of the nurseries of the Botanic Garden an oak forest of about one thousand trees; and several hundred of these were raised from the acorns you so generously sent *)

Mr Bloom has written to me & expressed how kindly you received him. It is a very serious & thoroughly honest man

*) Of pines I have planted in an altogether different way since 1800 many California & Mexican species of the genus Cupressus

though Dr Sluzo has
Carinna, which passed
into my possession,
~~has~~ proves also rich
in N. Amer. species still
of course it is but
a very imperfect series
of the actual species ex-
isting in your vast Ter-
itory, & new explorations,
such as Prof. Brewer's
must have largely added
to the species.
The 5th deal of the
fragments is about
half printed & con-
tains mainly new plants
from N. S. W. Australia
of Indian type.
Does your trading
require anything from
here? Ever yours
Ferd. Mueller

23/8/65

At last, dear Prof.
Gray, I shall have
an opportunity to
send a consignment
to you directly by
the, Patrick Henry,
which ship is to sail
in the middle of next
month for New
York. I will dis-
patch a box with
dry plants, containing
many some hundred
species a good
many from the tro-
pical east coast of
Australia. There will
be also some duplicates
of dry plants & like-

wise a quantity
of seeds. I shall
take the liberty
to enclose a jar
with reptiles &c
for Professor Agassiz's
museum.
Though Dr Sandys
you will have received
some of my new va-
rieties sent on the
9. from Liverpool. Though
Mr Osborne, my dear
and intelligent friend,
you and Dr Gray got some
other publications,
which he kindly took
with him for you
when he quitted Australia.
Dr Sandys will
also have sent you a
collection of 359 pri-
of seeds. Now since
peace is restored in
your country, new
encouragement will
arise to pursue
scientific researches.
I will do my best to
furnish material
for your museum, though
my engagements are
so numerous, that I
cannot go any longer
into the field myself,
nor get much leisure
to make up duplicate
collections. But I will
do what I can. I feel
I am largely in your
debt, for this is a
brilliant display of
N. American plant in
my museum, recently
received from you,

Melbourne - Aust
Geelong 24/1/66.

My very dear
Professor

Peace one more
smiling on your
great country, I
cherish the hope,
that science will
with invigorated
strides ~~with as vans~~
in your part of the
globe, where equaling
in natural history
remains so much
to be achieved. I can
understand, that Prof
Newcomb remains

Are the American Naturalists willing to exchange specimens?

with courage
from thence to you.
The efforts of the
Ship here have
kindly placed it
on the freight; there
will be consequently
but a nominal
charge for clearing
expenses & freight
to Boston. I will
summer gladly bear
this also. The case
contains a large map
of crudely dried &
therefore unprepared
algae, enough to make
thousands of specimens

from the Highlands of California will absorb all your attention; thus you have perhaps neither cared to receive much from me, but even the errors of war not deterred the calmness of your purposes. I feel however that I should endeavor to come out of my debt, which through your generosity I have incurred and that I should strive to deserve the continuance of your benevolence of which I have been always so proud. As a first instalment of my new resources I have sent off a good sized case this day per Ship Donald McKay, addressed to my agents in London, Messrs Botham & Blanchard Cox & Kay, Lower Thames Street who have been instructed to see the case forth

on the Vedwitz
arriving recently
a lot of fruit trees.
I had having heard
of their arrival
I fear the cur
has upset affairs
also thus for the
our little arrangements
offerings have to
perish in its own
stinking hand. I am
placed at considerable
disadvantage in get-
ting shipping
from here, in as
much as we have
never direct appear-

ances. All these
are from Port
Phillip Bay, fur-
ther a few fruits
of West Austr. Banks-
ia, a lot of mosses
of your Fern Tree Gullies
(unnamed) a few
prints, 33 kinds
of seeds in large
quantity for distri-
bution (for which
I might perhaps
receive pine seeds
Walnuts, Arrow
& other tree seeds
in return)*, a few
hundred of here-

* I have written Mr. Thomson to forward

bearing plants the rhizomes of which may be used for interchange and a parcel of dry plants for the bot. Society of ~~California~~ Canada. Perhaps some of the seeds might be sent to California, from whence fine seeds of any kind will never come amiss, as I am anxious to establish

I have sent several parcels of Mosses & Hepatics to Dr Stephani, Leipzig, & also a few to Dr Geheeb, Geisenheim, Germany, & to Dr Müller, Melbourne, Australia. Thus to rely on an occasional importation of seeds from home and the new lithographs of British plants (70 plates) the 4th vol of my Fragmenta, my fifth and the Characeanian work & the Cleistogamic Vegetation & other of my recent publications (to you, also some time ago)

Pray honor me with an occasional line & let me know your requirements. Let me also ask you to accept this little portrait & return for it your for my series of like masses of the great cultures.

Con gran
a Dearest &
Grateful
Fr Muller

I am preparing also collections for Professorship

Societies to send from here except to England, where all my continental friends & all my American friends have often opportunities to offer direct shipments.

My engagements in this department, multifarious as they are, have me lent little leisure; yet I manage to give some aid to Bentham for the Outer Plan elaboration of the

& I have nearly finished the Final of the fragments. I hope this winter I shall be able to sort all the duplicates in my museum for distribution & will not forget your behaviour on the occasion. — I have many duplicate specimens to give away. My collection comprises now nearly 300,000 specimens & though it is through your liberality with in plants from the eastern states of N. America, Possess but little of California & absolutely nothing from the Sierra Nevada. This being a State collection, all contributions will be sorely missed. If therefore you have still any thing out of Prof Brewer's collection to spare I shall gladly receive it.

I cannot express to you how eager I am, my dear Professor, to transplant some more of your noble Oaks & pines to this country. In my Arboretum the Oaks raised from the acorns kindly sent by you are the prominent feature, still few are it, if compared with A. De Candolle's list of Pinus I possess scarcely any but some of the California

Melbourne Bot. Garden, 22/4/88

My dear Professor.

The restoration of peace in your magnificent country encourages again to resume direct relations to men of science, relations which during the turmoils of war could not be continued without fear of intrusiveness. I sent you some little consignment some time ago to get out of my debt to some extent,

and I trust that the collections of the department will have so far been put into order, that I shall be able to offer a good lot of plants this winter for your museum.

I have of late sent duplicate original collection from his son, the collection is kept for private use & thus I have now by far the most complete collection of Australian plants.

Since the issue of my last report (of which I trust the transmitter copy arrived) I have described several new genera & proved Connarus, Stromatocodon, Cakile, Cassia, Antirhoea, Loranthus, Ophiorrhiza, Mazattia, Angiopteris, Dopatria (Among the new genera Acronychia Sch-nur Affonsea with 5-15! carpels is perhaps the most interesting. It has really pinnate leaves

cones. The 5th vol. of my fragments will ere long be sent to you. Will collection of cones for distribution in the southern states be of utility to you?

Ever your grateful & respectful

Jno. Muller.

Now I would wish to add your picture to the collection of portraits I have from the hands of celebrated friends.

Species & yet nothing could be of greater value among the trees to be imported in this country. Should you have favorable facilities to spend £10 or £20 a — in getting acorns & pine cones fresh collected & prepared for an early shipment, I should feel very much indebted for your obliging generosity in giving an order for the seed & the fund shall at once be transmitted.

My great aim is to bring the most useful trees from all parts of the Globe together into my parks for affording future means to select from them for forest culture independently. I have many species from the Himalayan mountains, but few Oaks of Asia. Still North America must be the main course to enrich my collection from. What are the principle avenue trees of the State for lining streets roads or walks?

Pray let me know what I can do for you. ~~Gladly~~ Can you command any thing within my reach. The establishment here is so young & to raise it involves incessant work. But as everything becomes established gradually more leisure will be left to carry decoration towards friends & national

any occasion, when
across through your
generous kindness are
again available to
by this mode of
packing trains
the of sending the
arrows in canvas bags.

24/5/66

From the enclosed
print, dear Inspector
Gray, it is very
doubtful, whether
the consignment per
Patrick Henry
ever reached you.
If not, as I fear, I
have still more
cause to claim your
indulgence for not
sending you more
contributions towards
your collections
I will however

not in all fairness remain in your debt.

I took the liberty to give to the venerable John O'Shaughnessy, who was Prime Minister a letter of introduction to you. Will you have the goodness to show this, our best, Statesman some kind attention when he comes to your city & give him with a few introductions.

Accept my best thanks for several publications you kindly sent me.

Yours regardfully

Jno Mullen

Dr Rodecky writes me, that he kept warm for four months in vitality by being packed in moist clay. It might be well at

them in the Amer.
Acad. of Science's
proceedings. For
your valuable kindness
I am most grateful.
I shall always cherish
them with veneration.
Be not displeased that
I burden you with
the kind transmission
of a small sending
to the Soc. Society
of Canada & the
Academy of Chicago.
I have finished the
5 vol of the Fragm.
But it has not yet turned

Melbourne Cot.
Garrw, 10/1/67.

A fair opportunity
presents itself,
dear Professor, to
send you some con-
siderations although
I had but short
warning and though
I am extremely busy
with additional
notes for the Ex-
hibition, I will not
allow the ship to
go without some-

thing for you & Prof. Agassiz. I send a few collections of dry plants & some unprepared algæ. It will not be before which for me to send grass-plants regularly. I wished to do so long ago, but a succession of extra engagements prevented it. O forward also some seeds, which may prove acceptable for introduction in the Southern States. After acorns & pine-seeds I have still a great longing. The Panama mail Company has generously conceded free transit for any Department. Hence facility for communication exists.

You have most generously dealt with my poor works, when referring to

I have also given a complete enumeration of all known Australian species.

Euryalia I have referred to Astr, after a careful examination of many European & American species.

I continue to your regard

Yours truly

It contains many remarkable plants, e.g. a Sitherolobium with 15! carpels, a leafless Sarcochilus, a new genus of Philydrineae (Helmholtzia), a Xanthoxylum with alternate ovules opposite cotyled., species of Ptelea, Tetradia, Fagara, Bugonia, Fraxinus, Eakile, Ridgea, Sloanea, Gouania, Cassaria, Euonymus, Hemiscylia,

Alewides, Comarum, Stromgylodon, Oenanthe, Ophiorhiza, Coelospermum, Eupatorium, Agnosmon, Humbugia, Coropegia, Genioboamus, Ligustrum, Ardisia, Chrisipelalum, Thesea, Pavolgia, Mamoziali, Cylindrophor, Cinnamomum, Nepenthes, Podomorphi, Asymipermum, Cleagnus, Pollia, Pholidota, Pogonia, Angiopteris, Malatta, Dejanaia & other genera — not

formerly known to be represented in Australia. Then are many new genera, Pagetia was positive with many ovules & no albumen, Hedraianthera among Celastrinae with ascoides anthers, Dorlingia & Cardwellia, remarkable genera of Proteaceae, — Gillbeea a remarkable genus of Cunoniaceae, Faradaya near Vitex, Atkinsonia near Nuytsia, Balfourdia near Dracomyelia,

algae & about 1000 dried plants divided into 4 collections, the largest containing about 300 species.

The will = Isabella Barnes

Since writing I have received the first proofs sheets of Compositae of vol. III Pl. Austr. Bentham has too far revised the genera. This seems to have arisen from an idea of that great phytographer that mono- (& I should add in his own oligo-) typic genera must be avoided. I have failed to see the force of the argument.

My views lead me to fair equivalution of genera in characters. Thus I deem Bellis & Bradyrome one genus, Brachycome & Bellidastrum, or also Vittadinia & Aloria, but I cannot in adopting such amount of character for a genus bring all Angiocarpeae under Nipriorephalus, Angiantheae, Gnephosis, Coloccephalus, Cephalipterum, Gnaphalodes, Craspedia & Ekthonocephalus! only 8 genera.

Such reductions seem to me no gain for facility of work only augment the already overburdened synonymy.

The genera in the Cos are

1, for Chicago
2, for Prof Lawson
3, Bot Sec of Canada.
4, Dr Behr, San Francisco

The rest consisting of seed, of Orchid bulbs which if planted immediately will flower in a few months, &c

no to go on.

Let me remain with sincerest regards

Yours

F. Muller

Without wishing to be importunate pray let me ask what can be done in my power to assure Victorian exhibition for Australia.

Melb. Botanical Gardens. 20/3/67.

Private

The enclosed bill explains to you, dear Prof. Gray, that again two consignments were despatched by my London agents. I trust they will give satisfaction. Your illustrious colleague might give perhaps an enumeration of all the fishes I sent. Alcohol being thus so expensive I have had outlays over hundred guineas alone for various ichthyological collections. I sent to different museums,

and to my knowledge
not a line is any
where written on
them. I spent in
the course of the
last 20 years about
one thousand pounds
sterling for zoological
collections for dona-
tions & yet science
has scarcely had any
benefits of them.

My agents in London
have shipped the
freight also to Boston.
Eucalyptus amygdalina
is measured here nearly
half a ~~hundred~~ thousand
feet high! Can you
kindly furnish me some
exact data on Sequoia
Wellingtonia for the
sake of comparison.

This winter I shall
be freer for museum
work & I will send
you many plants from
tropical Australia;
perhaps you could
give me some Cali-
fornian from the excellent
Prof Brewer's collection
in exchange.

A fish list from Agassiz
on all Australian waters
would be a boon for
coral zoology & a bless
of operation & encouragement

8/6/67

Dear Prof Gray,

In arranging the immense extraaustralian Herbarium here I find several omissions in H.f. & B. gen. vol. I & II & I am thus induced to ask, whether you have published any additions or corrections to this good & important work. I have sent some notes to the authors & in D.C. prodr. XV. F. Müller

has furnished also supplemental data. Would it not be well you received any observations of yours briefly accordingly. Thus an Australian phytographer has but little knowledge of American plants &c. Let me ask thus for instance what is Desmonema (Rafinesq. Journ. 28 (1833) quoted by J. Müller? What is Forchhammera?

5/2/65.

Just almost at the close of the monthly mail, dear Prof. Gray, I receive simultaneously your most kind letters of the 15. Nov & 2 Dec. I feel quite ashamed having on so great a man as you burdened such enormity of work in obtaining through your friends and some of your noble American trees in quantity. I feel almost sorry now having made such an inconsiderate inroad on your time, and the only consolation is, that you may — and I hope you will — one day cross the Pacific ocean & on a visit here enjoy the shade of trees we raised through your goodness. The walnuts came on so excellently, that I have to build like for your cork

goodness get many of our tropical species this time. The negotiation of this cabinet brings gradually many interesting forms, thus lately Aldrovanda, Erythræa, Musscia, Cucurbita, Cirrhopetalum, Pathoglottis, Dracaena (from Corylline in tubs, album & Eubrya differens), Gnophila, Gratophyllum, Thunbergia, Bauhinia, Chrysophyllum, Bassia &c

It is delightful to contemplate, that you will give us a synopsis of Sandwich vegetation. Your Manual you so kindly sent, will be a boon to me. It will bring so many well ascertained enlightened & expansive views

a special large nursery shed, there being then 5 special sheds, one for Cinchonas, 1 for Chinese tea, 1 for Pines, 1 for Oaks & now 1 for Walnuts & speaking of Cinchonas I might as have mention, that in all likelihood they would prove a great acquisition in your cotton-country, i.e. in the rich forest glens of any plantations. I have had my plants nearly out last winter (altogether I have about 1,000 plants of various Cinchonae) & I find that C. Condaminea will bear a temperature of 31° Fahrenheit. The dry summer heat that spread has stood in Sulphur but otherwise open valleys also.

It is most kind, that your friend Propleton will open time on the Algae. Perhaps it is a pity still it is a surprise, & at the same time recreative labor after some mental work. I will bear to extend knowledge in that branch of science. I have a large case now packing for you with Phanerogamae, but I am still engaged in preliminary labors on the 4th vol of the Flor. of Brit., to compress the Monopetalae (one compositae) & thus my distribution of Museum plants goes on slowly. You will honour as a slight recompense for all your

To Prof Eaton, Mr Osborn, and Prof Agassiz I can only send this time my salutation, but I will write soon to all these excellent men.

In the box, which I am packing, I will enclose several packages of seeds as a counter gift to those generous donors who supported your movement in my favor. Our Wattles & Eucalypts would thrive well in the southern states & as all these trees are useful in some way or the other they would not merely be objects of curiosity.

I am rapidly proceeding with the 6th vol of the Fragmenta; the 5th will have been received by you through your excellent

Consul, the General Latham who with his family occasionally honors me with his visits.

The package of Pineseeds by the Panama mail ~~do~~ will probably arrive in the course of this day, but not in time to refer to them in this letter.

To Mr Peabody I feel very much obliged indeed. Indeed I feel quite touched with all your kindness there. I have only one tree of Pinus australis yet, an important one, may yet in bearing nor likely to bear for years to come. Neither have I large plants of P. Palustris.

We require in this country such noble trees in masses for all the various public plantations around us.

Now only much cordial & grateful salutations yet & my best wishes for your health, happiness & the glorious progress of your labors.

Yours truly

Through Dr Sowerby you will have received the atlas of British plants & the 4. vol. of the Fragmenta. The little book on the Chatham island vegetation must have reached you before. It is antidarwinian in its tendency. The glorious marine decend its announcements of sufficient importance & must form a topic for a discourse at the Munich Academy.

If you desire it I could readily send a large cask of newly dried algae, if any American phycographer seems it worth his trouble to prepare the specimens thereof. To what any book or document I can send to your academy? or any specimens? and do I right in transmitting (in absence of direct opportunity) via London?

I know to know the effects of sending to your care a small parcel for Mr Wolcott via San Francisco

and nearly descrip-
tion. Your & Prof
Brewer's examina-
tion of the plants
from the highlands
of California — and
from Delightfully
overwhelming. So
gradually we become
acquainted with all
the organic forms of
the globe. In Ter-
ralia we know
now 9000 of the
10,000 plants which
constitute its flora.
You have been so gener-
ous to my establish-
ment, that it would
be an abuse of your

kindness will I to
ask for anything com-
ing I venture to re-
mark, that I am plan-
ning to make our Phan-
herbarium, to which I
mean my own a dona-
tion, as large as I can.
I commenced collecting
at my 14th year
in Denmark. Dr Fell's
collection I purchased
& I have interchanged
since 20 years with
best friends. By these
efforts I have accu-
mulated about 500,000
specimens & can therefore
work here heartily
with campanulin
independence.

Ever with profound
veneration your
faithful servant

Contents of Box
Shipped to Prof. A. Gray
by the Sonnesdahlia.
3/8/68

2 packages miscell. plants.
5 – West Austr. plants
4 – plants from Queensland
vol III & IV fragmenta
295 spec. miscell. Austr
seeds.
20 – Austr seeds in rather
larger lots.
a few Austr seeds of Prancé
Lophantha

for Proprietor
1 package plants of
N.S. Wales
1 package fungi.
A series of papers &
documents of the Mining
Department for Dr. Gray.

Prof Eaton 1 parcel
Kings Island
Algae

Prof Gray.
1 parcel with
miscell. Rubi
plants, containi
ning large num
ber of Earth Orchi-
deae in duplicates.

21/4/69

Aware, dear Prof Asa Gray, that you are staying now at Rev, I beg to ask, whether my large box with succulents and some seeds for you has safely arrived. Perhaps in your prolonged stay from home, it might be desirable, that some one of your friends would unpack the case, and not allow the seeds to loose their vitality.

I have quite a little army of young American Oakes & Walcotts now through your seniority & circumspectness.

With highest esteem

Gustavus Murdoch

17/6/69

I have to thank you, dear Prof. Asa Gray, for the kind transmission of the very valuable document, which you, with your usual skill, have furnished on the plants of our Federal Bremer and Balanden

It was transmitted with some dry plants of yours ~~by~~ and your Dear Mamma's by the poor lamenting mother of the latter. I will write to the poor Lady by this mail. Dr Engelmann sent also his original Journal & the memoir he wrote thereon. Enjoying you of your Rev. enjoyments I remain yours truly

Hedron Mullins

It seems Dr Engelmann went to Europe. If so, will you kindly acknowledge the receipt of his Journal, when you happen to write, or give me his address

Chenolea. Possibly species may occur on your saltplains, or — such as C. hirsuta (Kochia hirsuta) may become introduced. To this belong the wingless Kochias, with or without spines. Indeed the winged Kochias are hardly more than a section of Chenolea, in as much as the wings on some of the flowers remain occasionally undeveloped.

Can you favor me with a few flowers and fruits of Galax in a letter. I wish to compare the genus with some Australian ones.

Sent the Ca[illegible]

Melbourne
Bot Garden
5/5/92

I write only a few lines, dear Professor, to keep up correspondence. I have to send you many things but must wait til I get the chance of a ship sailing direct for Boston or New York. With extreme interest do I look forward to the elaboration of the Californian plants through yourself! What a treasure that will be to phytographic literature!

There are two or three genera, about which I wish to say a few words,

actually they are re-
presented in the Calif.
Vegetation.

Blitum. This I have
reduced to Chenopodium
as the position of the
seeds cannot be relied
on and as the calyx
becomes more or less
succulent (in some also) other ~~the~~
~~species~~ salsolaceous
genera. Thus ~~not all~~
among Atriplex we
have the A. semibacca-
tum in which the sepals
(particularly in their
lower part) are getting
as succulent as possible,
being bright colored beautifully
crimson. You are of
course well aware,
that many Blita
have the calyx as dry
as any Chenopodium.
Blitum virgatum I have
called Chenopodium
Blitum, as there is already
a Chenopodium virgatum
of Thunberg from Japan.

Apium. This must be
so far enlarged as to
include at least a
portion of Helosciadium,
a view adopted subsequently
by Bentham & Hooker.
Thus I referred Helosci-
adium leptophyllum
to Apium.

I should feel also obliged for a few flowers & capsules of Samolus ebracteatus, to be utilized for my supplement of the "vegetation of the Chatham Islands"; for this work the number of cotyledonar plants has between doubled by Mr Travis's last voyage, but the additional species are almost all identical with New Zealand, while many interesting and remarkable novelties from Lord Howe's Island have passed into my hands.

If any friend of yours living on the coast of the S. States would scatter simply the enclosed seeds over the sand in some gully and cover it with a few twigs, he would be sure to see a very important plant arise on your shores.

Always with best regards

Yours Ferd. von Mueller

Would you kindly furnish me with a few supplementary notes for my tree list, also ask the excellent Dr Chapman to do the same.

Melbourne Botanic Gardens,

26th August 1872

Sir,

I have the honor to acknowledge the receipt of—

1 package of dried plants from Dr. C. L. Anderson of Carson City

1 package of dried plants from the collection of A. H. Curtiss of Virginia

which you have been pleased to present to the collections of this establishment, and for which donation I beg to tender you my best thanks.

I have the honor to be,

Sir,

Your obedient Servant,

F. v. Mueller, M.D. Director.

Professor Asa Gray, M.D. &c

Melbourne
Bot Garden
26/8/92.

Yesterday, dear Prof Gray, I got the packages of Museum plants, through your generous intervention secured from Mr Curtiss and Dr Anderson, and obligingly brought by the Captain of the Ship Burnside. Both contributions are ~~a~~ splendid additions to my Museum material, and I will make a contribution as soon as I have a fair opportunity

This occurs early direct to Boston; or I may perhaps avail myself of the San Francisco & Line for the purpose. The Acorns will be always a great boons and to any nuts. The wood specimens for your own purposes shall gladly also be forwarded. Always with regard ful and grateful remembrance yours

Fred. Von Mueller

The "Celtis planito" sent by last mail may prove also useful to your southern states. Any additional notes to that publication and my list of timber trees would be incorporated in an early ~~any time~~ supplement and gratefully be acknowledged. Prof Torrey, Prof Brewer, Mr Eaton & others, Prof Hoffmann may feel inclined to furnish also kindly a few supplemental notes.

Wilhelmine
bei Jaura
8/12/72.

Will you allow me to remark, dear Prof Gray, that when I was residing on the Baltic and North Sea (1840–1846) I had ample opportunities to see the clear distinctions between P. maritima and P. distans. The former is a stronger plant & has a long creeping root which runners

is easily secured by pulling the plant slight in the sand. Possibly you have only one of the two on your cards. You may be able to set this right for a new edition of your most valuable Manual. Mr Watson has kindly sent me a fragment of Galax aphylla and Saxifraga ebracteata. The former seems referable to Saxifragaceae

The Report, sent by Mr Watson, seems not to have yet arrived. A few supplemental notes to my tree list and, select plants' wants from you be most acceptable and publicly acknowledged.

With the best wishes for the stability of your health and the progress of your glorious re-searches yours

Gordon Mueller

Melbourne
Cos Garden
Private 8/12/72.

Long since, dear Sir Roger I ought to have written to you, but for a long time past I have been subjected to much annoyance here, far more so than even our friend Hooker. The my time was largely wasted in merely ~~to~~ defending my position, and almost all other work has come to a stand still.

for his subsistance, has
no family and moved
in the calmness of private
life ever since his youth.
Then I think also, that
he has helps, such as no
one else ever can enjoy,
by the large means of
the well organized Kew
establishment. So it is
with Baron Liebig for
Chemistry in Munich
and others great men
had other enjoyable
advantages. I for my
own part have provided
above for Bentham's use
58 large boxes with ope
ciferrly arranged plants
for ~~Bentham's~~ his 6 Austral
volumes, each box contai
ning at an average aver
20 large fascicles. The time
of collecting and examining
such vast material has of
course been far more enthusia

Melbourne
bot Garden
22/4/78

Many years ago, dear
Dr Gray, our late friend
Dr Sleeby wrote to me,
that it was always a
festival-day to him when
a letter arrived from you;
and really so is it with
me, though my tardiness
of reply may not accord
with the sentiments of
my expression. So your
last generous letter re-
mained also unan-
swered for some time.
I wish you could have
honored Australia from California with
a visit, though you will
find it perhaps as dif
ficult to liberate yourself
for a lengthened time fro

official obligations, as I find it. Thus I do not think it likely that I can shall be able to set my foot on American soil, though even honored by an invitation from so great a man as yourself.

It will be glorious, if the greater ease of the autumn of your laborious life will allow you to visit your inestimable Universal work on plants of the United States, though you may find it impossible to embark in your research also the vegetation of Canada and Mexico, on both of which a special work is sadly wanted ~~unless~~ until Dr Lamson's explorations and research may supply one of them or Canada brought to a final issue.

I agree with you, that Eucalyptus, Acacia and Cinchona plantations would become important in your Southern States. Even now it is proved in my laboratory that the taroil of Eucalyptus can be separated into not less than ten well marked oils, each available for special technological purposes and obtainable in innumerable quantity. I have sent samples of all these and other products of Eucalyptus to the London Exhibition.

You speak of the enormous work your illustrious friend Bentham. Yes it is marvellous! You must be is blessed with fortune, needs therefore not work

After the long "struggle for existence" in which it seems like in Africa case a glorious victory is for me to be achieved I trust with renewed courage of life to resume my interchanges with friends abroad which by the various restrictions in my Department and the cruel and undeserved persecution to which I have been subjected for some of the last years had come almost to a stand-still. If the woolbrak brings our ports in direct contact then I shall have a splendid opportunity to send you from time to many other museum objects.

With the professional regard yours faithfully

than the time needed for comparing them with the Kew collections (to which I also largely contributed) and for writing the diagnoses. May however providence long allow that venerable man to devote his great intellectual power for the promotion of knowledge. As Sir Bentham and the older Hooker are among the foremost, who after Linné have stamped their names on every square mile of the globe through vegetation! May you also long yet retain your mental strength to continue as you are an glorious literary and the elaboration of the Compositae you may allow me a remark, which bears on classification of these & other plants

I had occasion for the 60th number of the Fragmenta (a work after a whole years hindrance now slowly resuscitated) to examine some Stylidia. This led me to reexamine Donatia, collected by myself in the higher Alps of Tasmania; I found it undoubtedly as indicated by Dr. Hooker Stylidium. It is almost a Phyllachne (to which I refer Forstera) with its column dissolved into its constituent parts and with a gamopetalous corolla deprived of its tube. Like in Galium, so in Donatia and many other genera, the so called petals might be regarded as segments of a monopetalous corolla on account of the very broad base, with which they are adnate. It seems to me, that this character has not obtained the consideration which it deserves. Perhaps Dr Hooker may have taken prominent notice of it in the new volume of Genera, when working on Rubiaceae. I restore for Stylidium now also the older name Candollea, of which you might perhaps take public notice in the papers of the Academy, as more than a dozen years ago already I showed (Plants of Vit vol. I) the untenability of the little various genus named after the great Decandolle for whom ~~the~~ and for ~~whom~~ the heirs of his fame the Stylidiaceae genus would constitute a magnificent widely extending generic movement.

Melbourne
7/11/73

Allow me to ask you, dear Dr. Gray, whether of poor Horace Mann's collections of Hawaiian plants still any are available through purchase or other wise. The reason for this inquisitorious question is simply, that of late I have become particularly interested in the Polynesian Flora. I always liked to be informed on the subject, as the plants of the Pacific islands bear manifold relations to those of tropical Australia;

Always I have time & now I must close for volume VIII of Hooker's Icones.

Besides I should be glad to learn, whether you are perhaps engaged on any studies of plants from any of the islands. I fancy you are not, as you have in California a nearer & a more fruitful field. The S. Sea Islands are much with us in communication now, and thus often questions arise before me officially concerning their plants. Thus I ought to be noted well up on them.

Did I send you the 7th deal of the Fragmenta? I will forward my essay (a very short one) by mail post, as it is only as yet hastily printed.

Always with deep regards your
Ferd. von Mueller.

My address Rentoul Cottage Rentoul Lane Fitzroy, Lower Melbourne Victoria.

but I had occasion to write a chapter on the plants of the New Hebrides for a volume of a young friend, who went there for his health last year, and who on my suggestion picked up a number of plants there. This led me to put ~~up~~ into some order all the plants from the various groups which I possess, but I have only some ferns from Wanaia, ~~given~~ sent me by Dr Gillibrand (a personal friend of mine early in life) about a dozen years ago. Poor Mr. Mann promised me a number of plants from there, but death overtook the young and excellent and promising man early. I do not wish to tax you with troubles or ask you for gifts. All I want from your kindness to learn, whether I can purchase any plants ready anywhere. That would save also my time of effecting a return-sending.

Of course I possess your great Work on Wilkes's Expedit. Poor Seemann's volume is also a great help for studies of the Polynesian Vegetation. Let me also kindly be informed, ~~what~~ how I can get any stray essays or any parts of the publications of your Academy bearing on Polynesian plants.

Melbourne
New year's day 1874.

The prints of the essai on the plants of the New Hebrides, dear Dr. Gray, came by a few hours too late into my hands for being forwarded by last month's mail. So I send them now a copy of them. I fear that I was unable to consult all your important memoire on the S. Sea Islands plants as I ~~am unable~~ cannot within my means ~~to~~ obtain all periodicals and works on your plants, and thus many some essays may escape my notice.

Would you do me the great kindness of glancing over the essay, and should you find that I include any of your contributions to the volumes of the Academy, or any other of your valuable publications bearing on S. Sea Island plants, — would you then afford me your aid in directing my attention to the most recent work of the literature of the S. Sea Islands. Perhaps even you would extend your generous goodness so far as to send the portions of your writing, which I ought to have referred to, as I intend to follow up this essay soon by another on the plants of Samoa.

Always yours sincerely & with best newyears salutation

Judson Munroe

Pray convey to Agassiz my expression of condolence at the lamented death of his celebrated parent. This is a great loss to natural science.

Melbourne
20/4/74

As always on now, dear Dr Gray, your letters give me great delight, as they are so full of genial genius.
Our Chart sighted your Congress would act, after incurring the expense of a great naval expedition, to withhold the means of bringing to publicity all its important results, among which yours are not the least, no among the of most lasting importance.
It is a glorious task also for you to grace California & the other western states for your works & volumes. So we shall at last enjoy the use of a complete flora of the United States, and we hope you will finish off with what comes to you

phytographically as a just share. Mexico & Lawson meanwhile seems to deal effectually with Canada, as Gribe bank has done largely with the Antilles.

Do you suppose I will write to Dr Gillbrand in Reidelling concerning Hawaian plants. I knew him early in life, but have lost sight of him for years. I possess in my private library your volume on Commodore Wilkes plants with the folio Atlas, and have largely quoted both in allusion to the New Zealand plants.

If vol. VII of the Fragmenta is not yet gone to press it will be sent; vol VIII will appear in a few months.

Pray convey to Agassiz our my condolence at the loss of his illustrious father, from whom I enjoyed much encouragement.

Young Agassiz will inform he most requires from me. To contribute material from every branch of zoology is in this expensive country too costly for me; but if any special act of obligation are just wanted for really forthcoming works, I would willingly send what I can to any London address of his museum on pair free.

With deep regards
Yrs. von Mueller

I have lost entirely sight of the excellent and ingenious Mr Osborn.

Private Melbourne 7/8/75.

I have to acknowledge, dear Dr Gray, your kindness of sending me the new volume of the hist. of plants of Wilkes's Expedition, as well as several of your valuable publications. To one of the latter from the American Journal of Science & Arts, April 1875, I shall at some length refer in this letter. I was also glad to learn from Mr Sargent, that the Todea, which was a private gift of mine, has reached Cambridge (Boston) safely. I was the first to introduce these huge ferns to Europe, though it might have been done 300 years ago from South Africa and many 100 years ago from New South Wales. It is also pleasing to me, that I have mainly initiated the large export of fern trees to Europe and solely to N. America now also; and so it is with the already extensive export of tall Grasstrees from Queensland. I mention all this to show you, that I am actively still engaged in horticultural interchanges; thus therefore all Mr Sargent's sendings can be directed to me as before.

I am delighted at the progress of your N. American Flora, which will to a large extent elucidate also that of Canada & Mexico. At the end of this century, so I anticipate, nearly all the plants of the globe will be known & a complete System, except of minute cryptogams, be constructed. In Australia now already novelties turn up very sparingly, though we will occasionally have additions of Indian plants into this continent.

I trust you will forgive me, my venerable friend, when I depend my poor fragments against Bentham's assertion, that they are comparatively useless on account of inaccurate method! Had I titled this unpretending record of new discoveries or cursory observations an "Australian Flora", then simply & the contents would not well accord, though the

Dr Asa Gray
Harvard University
Cambridge
Massachusetts
U.S.A.

usefulness could even then not be disputed. Fragments are carried together in this instance, to serve subsequently for the building of a whole; and I thought to deserve some praise for having kept these fragmentary notes together in a series of volumes, instead of scattering them through the journal of many years of several nations, then of course far less accessible. Why and publication should according to the idea of our great friend be discouraged I have utterly failed to understand! Just as well the best magazine (which withal Pritzel's index is difficult to use) and still more so all fragmentary observations in journals ought not to be published, but be laid aside, until after perhaps many years a monographer turns up to use a small portion of some such notes, and according to this harsh & discouraging dictum, no one ought to touch a rare imperfect known or new plant, unless he was rich in worldly means & at command of much time to plunge into extensive essays. No one except at Kew, Paris Geneva and a few other places then should be allowed to work! — Be it enough. I am convinced Mr B. is himself sorry for his hasty remark against poor Miquel, who can no longer defend himself against me. B. in the Flora Australiana (not correctly called B. Australiensis) uses my fragments for every page. The fragm. have guarded him against endless errors, into which he would have fell, and the fragments also have cleared up subsequently numerous incorrect treatments of the plants in the volumes of the Flora published before. I have not made a single remark, that could have given an offence, though Mr B. has not shown to me as a younger man working with far less facility always the same consideration. The matter for the fragments came of course after the Thizolls & Pottinge of Genophyllum, though surely me as a distinct genus, is included among in B. Eurochinus, though it does not belong to Anacardiaceae; many other errors could be pointed out as dished up in the fragmenta. The genera are badly arranged by Bentham. Thus Diplolaena has but 1 Microcyle but 1, Gelzinovia but 1 &c. This gives B. in that of 10 spec., every genus can be maintained. Thus altho I have added 350 spec. in the fragmenta to B.'s six volumes, yet I had to reduce more than that number of his as untenable. Here a difference of opinion arises as to genera. If I take for a type of a real genus Homo sapiens, I can still, imperfect as our knowledge yet is of the genus of all species of plants, find some standard for specific value. Our illustrious friend not believing in species as created, but adopting permanent varieties (a contradiction in itself) seems more in fact than by research a hopeless settled limitation of genera. Hence his views are very different to mine. Let me respect his, as I would fain hope he will respect those of a younger worker. Perhaps, my revered friend, you may deem all this narrow-minded on my part; but I remember, among what people I have lived my life out. Here as a foreigner I am envied, resulting in my votes, my buildings, my staff & many all being swept away. My several adversaries will take up remarks, such as Mr B.'s about the worthlessness of the fragm., just as adversaries remark on my naming of plants, quite in contradiction to facts, was allowed by the excellent Dr Masters to slip into the Gardeners Chronicle lately to be used against me. I shall nevertheless

continue the fragments, so long as
providence lends me strength &
sight. I can depend therein any more
ties, and also any corrections and
additional notes on localities. Good
& full indices make the use of the va
lumes easy enough, and as you will
see in the 8th (at its end) I have enu
merated all the genera added since Bent
ham's writing. Thus for a supplementary
volume the material ~~would~~ gradually
arranges. The arrangement in the different
numbers is not altogether without
method, always commencing with higher
dicotyledoneae. That I am possessed ~~by~~ of
some little idea of method, where necessary
I have shown in the "plants of Victoria".
Now - dear Doctor - could I have worked
out these volumes so rapidly, without my
prior labor? About 70 large cases of plants,
with few exceptions, all gen. examined
over gradually in the dozen years since
to him. One very large case with examined
appearance, an other with Gramineae
& another with genus is ready. I told
our venerable friend myself that I
regretted he had undertaken the Flora
of Austr.; it overthrew my literary plans
& life. The work is already very important
& should have been left to myself, who
I could have finished it at last as Now.
Then by this time the genera (a far
more important work) would have been
ready & perhaps also the Flora of Tropical
& Sup. Africa. Though 83. is the author,
my labor for the work after 28 years
stay ~~[illegible]~~ and travels in Australia, at a
sacrifice of £10,000 of private means, is
far greater, than those of 15. Yet I gave you
cheerfully a subsidy to each volume out of the
slender means of the Department, for

Inclosed the Compositae
Genera & Species Compositarum
Genera & Species Gramineae
Genera & Species Cyperaceae
Genera & Species Fungi
Genera & Species Lichenes
Genera & Species Hepaticae
Genera & Species Musci
Genera & Species Algae
Genera & Species Filices
Genera & Species Rhizocarpeae
Genera & Species Lycopodiaceae
Genera & Species Equisetaceae
Genera & Species Gymnospermae
Genera & Species Monocotyledoneae
Genera & Species Dicotyledoneae

My position was exactly at the same footing as Hooker at Kew. It was not nor ever can be one as Balfour of Edinburgh. Hooker is essentially an administrative position, Balfour is essentially an educational position. In your own case, though you are happily not hamstrung out of your garden as I am, you may not have the responsibility of Sec. Botanist for the United States, as Hooker has for Britain & I for Australia.

Melbourne
Private Christmas day
1875.

I have given, dear Dr Gray, to the Secretary of the Victorian Exhibit. Commission an introduction – letter to you. He is very influential & intelligent, and I recommend him to your special attention, & should you come with him at the Philadelphia Exhibition in official contact. The articles which he takes from the Melbourne bot. Garden, are most miscell. Even the laboratory articles are only a repetition of what I sent to the London –

Exhibition, and this on a small scale only and inferior cases. There is nothing new among them, except indeed papers from Davis! Of course no one could make even paper profitably out of it at the Cape of Good Hope. All this miserable failure arises from the botanic garden being withdrawn from my control, to become a sinecure of a near relation of the Premier Minister, an ordinary gardener. This man has even the laboratory & apparatus, with a view of excluding me not merely from the garden but also from the ground. I will not enter on this painful subject at any length, as you have not written to me in a manner so miserable to me as Dr Thwaites did to his former colleague. It is however important, that I should put you on your guard, so that you may not unconsciously work perhaps into the hands of my adversaries, by giving your opinion on my mission to our embassy, Mr Lang

I demand a honorable restoration of the Botanical Garden to the San Sovereignty and a transfer of the ordinary garden for plebeian culture to the numerous nurses and parks around Melbourne, which are largely endowed specially. This is the only principle on which you can support me; if you cannot do this, then at least do not hurt me as some other formidable leagues have done, by rejoicing of my being relieved of drudgery! for which I had all along far better gardeners than the new comer. Ever regardfully your friend

Ferdinand Mueller

In any conversation with Mr Henry you can of course only show the absurdity, supposed Dr Mueller was deprived of his garden, where his plants, his staff, his notes and his buildings are. How could he then carry on the departmental service? — I was only able to keep a small portion of the Department going by spending almost the whole of my meagre salary for keeping the wreck of the department afloat!

Indeed I am easily, domestically, financially and to a great extent also departmentally & scientifically ruined. Not even an office room is left, my law library a collector, no vote for books, instruments, journals, transport, yet the daily demands on me by the Australian public daily increase, with a tropical information on cattle, resources, trade & industries & very wide indeed in this line.

To you, my dear Dr Gray, the resignation of your directorship under friendly arrangement may be an advantage, provided you have no responsibilities of a Gov. administration kind. To me the withdrawal of the Director's hip is a deathblow, and this is all the more painful to me, as I was purposely starved out in the last period of my administration which the young Sydney Morning Herald, who in reality is now Dr Hooker's colleague was supported with enormously increased means as soon as he came.

What a grand completion will be your California work for the extraordinary volumes on your U. States. I trust you will live to include the Mexican Flora. Is there any publication from which I could glean knowledge of the <u>technical</u> value of the Mexican Oaks, Pines, &c &c

With regards & remembrance

Ferd. von Mueller

Vienna / 1876.

Let me thank you for your noble letter, dear Prof. Gray. Like yourself I find, that if ~~once I let~~ any letters ~~remain~~ are left unanswered <u>at once</u>, they are not likely ever to be answered at all; for as a punishment of the remissness the heap of unanswered letters becomes then more formidable every day and I give it up as a bad job in despair.

However the excuses of the first Napoleon in these respects do not apply to a great man as yourself.

I have sent you the nineth volume of the Fragmenta, also prints on Japan plants & the reprint of the article in the Victorian Volume for the Philadelphia Exhibition might be useful for your southern States in a pamphlet form. It ought to pay any printer.

Perhaps you deem these poor efforts of mine ~~of~~ worthy of a few friendly words of encouragement in your journal on Tuesday.

Of course I do not wish any retraction of the remarks made at the West Point by a most venerable and revered man, but after my publication is publicly stigmatized by him as almost worthless or useless, I cannot possibly send it to him any longer with any self respect.

Nolhamm
25/8/76

Let me thank you for your friendly note, dear Dr Gray, and for the splendid volume on Californian plants, for which anyhow I would have sent, but which I value all the more from your hands. I shall closely compare your diagnoses of the orders, as I have recently written the characters of them

last year publications, in the records of the American Academy. Any words from you have such authority.

In the School flora I have combined Bravoenia with Cabomba, which may interest you. I do not see, how the two genera are to be kept separate. Of course I do not think any more about Bentham's remark and should never think to give him pain.

Con your fine work much

for my school flora, of which the first part is in print. I shall be able to improve now from your large experience on the characteristics, which I had adopted.

I have used the term 'fruitlets' for carpels, 'stalklets' for pedicels & to make the language as plain as possible for schools and have for want of space omitted many characteristics or details & not absolutely requisite for recognition of an order or genus. There is very great difficulty here to get anything published, printing being far more costly here than in Europe and America.

To Trimen's journal I have sent last month some notes on the affinity of Plantaginea, which bear some relation to Loganiaceae. In seeds of Logania & Plantago are very similar and there are other points of convergence.

I feel highly gratified about the friendly notice, concerning my

14/4/78.

After a very long pause, dear Professor Gray, I again write to you. I was almost on the point of meeting you & Hooker in California, as a friend of my youth, Dr Behr, invited me since years; and just when you & Hooker was out ~~of~~ health & ~~on the~~ intended to go across the pacific to California; but finally I was induced to spend the 3 months here in West Australia, where I travelled observation-lines of 1500 miles in 9 weeks, 900 miles on horseback.

You would get due credit for them.

Perhaps you might be in the position to extend your favors so far, as to procure for me also any publications of the Centennial Exhibition bearing on Utilitarian plants. If not accessible from Government, I would willingly remit for such sending.

Now, my venerable friend, if there is anything ~~also~~, I can do for you, pray command me heartily my services. With poor health I also say, it is always a festive day when a letter arrives from Asa Gray.

Regardfully yours

If you care for them, I can send you specimens from Mt Auto, having collected on land right north to Shark-Bay.

By this mail I send you & also the Academy the 10th vol. of the fragmenta. Pray send me the number of the journal, should you condescend to refer to the work.

Now I have a special favor to ask. Could you spare one day of your precious time to cast your eyes over my "select plants" of which you will have a copy, and in the preface to which volume I allude to yourself. It is my intention to issue a new edition at the end of this year, and I like to make it as complete as circumstances will permit, and for which I have collected many supplemental notes, so that the volume (even as far as my present out supplements extend) will reach 400 pages. From your semibacular experience an immensity of additional notes could easily be obtained; particularly since you saw the ~~[illegible]~~ plants personally.

1/8/78.

It is my pleasing duty, dear Dr Gray, to acknowledge the sending of your <u>most valuable</u> and important volume on N. American plants in continuation of the great work of Dr Torrey & yourself. What a host of novelty the rich, particularly western flora has afforded you! You may well be envied for your grand successes!

In accordance with your wishes, I have forwarded a copy (bound) of vol. X of the Fragmenta for yourself. It will be long before a new volume can appear, because only rarely now new plants turn up in any part of Australia. If any of my publications are acceptable for the Academy, of which you are the dignified president, I will gladly send them. Any reviews of my writings from your friendly pen would remain unknown to me, unless you sent me the print yourself, as in former years. I hope you got my English (enlarged) edition of Mitchell's Chemistry of plants, which ought to prove valuable to you, indeed to any medical man. Regards fully

Yours truly
Ferd. von Mueller

President, likes to have also a copy of the Atlas, I will be happy to send it.

Various publications have been forwarded to you from time to time. I hope they reached you "franco"; perhaps they never arrived at all.

With the best wishes for your health & happiness and for the progress of your glorious labours I remain your regardful

Frd. von Mueller

6/9/79

By this mail, dear Dr Gray, I send you the two first decades of the Eucalyptus-Atlas, and I hope to send the 3th & 4th by the October Mail.

In any review, kindly remember that I have been cruelly excluded out of my bot. garden for more than six years,

where I had about
60 species of Eu-
calyptus under
culture, many of
them since lost.
The distruction of
my Departmental
in most of its branches has delayed
also the appearance
of this Atlas, and
you will also kindly
consider, that many
of the experimental
tests of the woods,
whether chemical
or dynamic or
anatomic could
not be carried out,
since in 1873 even
my laboratory was
pillied down by
more malice, and
I even was deprived
of my apparatus.
If you review the
Boradas, pray, send
me the pages of the
periodical, as otherwise I shall never
even read the review
myself.
If the Library of the
Academy, of which
you are the worthy

Private

Mueller 21/2/80.

The February-mail from North-America, dear Dr Gray, brought me your kind ~~letter~~ sending of the biography of Prof Joseph Henry, which I read with all the more interest, as (through the Smithsonian Institute) I ~~became~~ myself into communication with that illustrious man for many years. It is a beautiful piece of writing again, this of yours, – though – may I venture to say so – Ritchie, Cammstadt, Faraday and Wheatstone might claim a place in ~~those~~ the series of those, who brought electric telegraphy about. Thinking of the Smithsonian Institute, may I ask, whether any desirable volumes are missing in the series of my own poor publications, kept there. At antipodal distance and under great adversities of later years, I may not have managed, to get volume after volume regularly across to you, and some may now be lost on the way. – But now to an other subject.

I should doubtless as much like to gratify my friend Dr with all the facts he desires than I can

Some years ago, when you allu-
ded to the fallacious remarks
of Governor Bowen, propounded
in conversation with you, regar-
ding my miserably changed
position, you made ~~the~~ in your
usual generosity the remark:
"rest assured, if I cannot help
you, I shall at all events not
harm you". When now I read
your kind review of my work
on the Eucalypts, you allude feelingly
to the difficulties, which beset
my path of research even in
a work of this kind, but you
– my honored friend – neutralize
completely any good effect, which
a word from <u>you</u> might have
done me by the phrase: let him
consider, how much valuable time
he saves for true botanical work
by his riddance from the multi-
farious cares, which garden-supe-
intendence involves." I hope earnestly
that this review by you will not
fall into the hands of my adver-
saries here, as it would <u>smash</u>
the strenuous efforts of myself
and a few scientific friends, to
reanoritate at least to a small
extent my formerly illustrious
& so highly <u>useful</u> department.

Now for a general principle,
such as you lay down in the
above sentence, may apply
to the Garden-administration
of any University, I should not
venture to pronounce. Even in
such, <u>local circumstances</u> must
greatly affect such a general pro-
position, and I should be loath
to give on it a public opinion
regarding ~~on~~ <u>any</u> institution, in which I
had never visited, or which I
could not judge fairly at a
distance, lest I might inflict
– however unwillingly & however
unprovoked, an injury. To the
position of <u>mine</u> or <u>any</u> Gov.
<u>Botanist</u>, the proposition or
principle which you lay down, –
my generous Sir, – is <u>utterly</u>
<u>inapplicable</u>, as I practically
find out in the daily execution
of my work! – Thought Hooker
once, in disgust of Aiton's
conduct, actually wanted to
relinquish the Kew Garden; I
feel sure he is glad to have
thought better of it, and I
certainly, when he told me of
his intention, advised Sir Wyllie
to remain <u>Generalissimo</u>.

But, however that may be, Melbourne should not be judged even by Kew, as Sir Joseph would at all events probably have no actual hostile intrusion on his position, had he merely kept the museum, though I cannot see, how his museum work can be sound from the horticultural work & vice versa, without causing impediments, intrusion, misunderstandings or in all directions. Here my being driven out of house & home, away from my thousand of kinds of living plants, from the stoff trained by me, from my laboratory & seed magazine and indeed all I had, except the small Journ Bot Library and the only herbarium room, here this senseless and cruel measure, dictated by envy & reputation, has had a most disastrous effect! It took away from me even the means of keeping a ~~be~~ collector in the field for the continuation of the fragments, it stopped my introduction of plants for forests & fields & pastures, it led to the

pulling down of my Laboratory & the withdrawal of my apparatus, it tied my hands so that I could not do a single thing for the Philadelphia Exhibition nor any other Exhibition since, though as far back as 1855 I brought out the Eucalyptus-oil for the first French Exhibition, an article, the export of which up to this time (and steadily increasing) represents a sum of £15000 in the Export-trade of Melbourne already!* Not even as much as an office-room was left me, my library had to be stored away for years (and I have only lately ~~bought~~ got it out again, having bought a small cottage through a Building Society). Doubtless you (& perhaps Hooker & others) will say, that I enjoyed a splendid salary, & there ought to be no difficulty to provide for all my work ~~out of~~ out of that. Now it is nominally, not actually so. — Melbourne is an exceedingly costly place to live in; my income moreover

* The same may be said of the export of Pearl-shell, Sandalwood, Sea-cucumbers & Sponges.

is consumed to keep the
wreck of my once illustrious
Department afloat, though I
never touch a card or billiard-
ball, give no parties, live the
simplest of life (Parlora life
too!), never visit races, but
do not like to be left quite behind
in the race with my compeers.
Imagine Hooker out of Kew!!
Though I have a high feeling for
professional honor, what
say is not sentimental, but stern
reality, and if you, Professor Gray,
only for one hour visited my
place here, you would deeply
sympathize with me, and
would do for me, what Dazos,
Holland, Carpenter, Huxley, Tyn-
dall, Darwin & Bentham did for
Hooker! — Let me give an instance
only ~~this a~~ two days ago I place
here as a member of the local
branch of the British Medical
Association Dr Rings new Calcutta Febri-
fuge before the members as a
cheap, but highly efficient thera-
peutic remedy ~~for~~ in hospitals & private
& for indigents, — not crystalline
nor quite purified, but a mixture
of Quinine, Cinchonin, Cinchonidine
& Quinidine & perhaps also the
amorphous alkaloid, the Quinine
however prevailing. Why do I
mention this? — If I had not been
ejected without any fault of mine
out of my institution, I would have
had certainly Quinine from
my own trees in the Melbourne
Exhibition this year, whereas
I shall have there nothing
of any kind, because my hands
are kept tied, and all working
material, to give vitality to my
research, is taken from me.
Ignorance distrains my kin-
dness and even so much else,
that we could grow in one or
the other region of our colony
to advantage, just as you could
grow in the South of California
in warm sheltered forest glens
the Peru-Bark trees. I feel sure,
you will not argue with me
from so far a distance on what
my position here ought to be,
but perhaps you may say, let
others grow the Cinchona! But,
my dear Sir, I am to be the
leader here of vegetable new
industries, and I must observe,
and that daily & hourly, to
help the colonists practically,
and if I cannot do that and

make annually a good show
(look only to Hooker's Icon
Reports!) then I am bound to
go finally to ruin.*) What do the
colonists care about my "Flora"
as a whole? For that they
would never for any period
maintain my position, and
as I think all I had in my
rewards (the printing of
Wittstein's Cost me — exempli gratia,
£220 — out of my private purse
and only about one tenth of the
copies were sold), I should be
adrift as Gov. Botanist
without a pension, should be forced
to give up the Library & Herbarium
also & spend the last days of
my life in obscurity & poverty,
getting only once for ever under
the Civil Service law (a com-
pensation for loss of office. Count
de Castelnau (with whom Dr.
Woodall was out) wanted me
to go always according to his
unfortunate talk here, to be
relieved of drudgery; but one fine
morning he suddenly came & announced
that I had to leave my creation
& even the House, which I built

*) The daily question in Kew is already: What is to be doing? What
to do in the evening?

in 17 years, he wrote at once a doleful lament, though he helped unwittingly to undermine my position. However, he also numbers now with the death, & I was one of the pallbearers of his coffin this month.

You must pardon, dear Dr Gray, when I inflict this long letter of sadness on you. I fancy, it is my last! I have a presentiment that I do not live till the end of the year! I am since a long time under constant insomnia, and if I ever sleep a little, I am in dreams again in my little paradise, in my hovel, among my plants, among my gardens, who only wanted one hour daily attention of mine as a rule, and did the drudgery for me, as they are now doing for the Sydney nurseryman, who is now the Directorial Colleague of Hooker, Regel, Eichler & Co. If I spent a few additional hours daily in the garden, it refreshed my

mind, invigorated by a thorough oxygenation of my blood my physical strength, originated daily new observations, not only phytographical (for which the money-grubbing Australian Communities do not care), but industrial tests also so. I am forced to leave Melbourne at the time of the Exhibition, — for as a disregarded Director and as a head of a Department without a Department, I cannot impose myself to the illustrious Strangers, while an unscrupulous intruder praises himself up daily with my theories, on which the sweat of my brow adheres since the last quarter of a century. I have said as much to the excellent representative of your States in a letter to him in Sydney, Dr Cox. Was I fear I may not live so long, and then you may have still after all that even misled you.

a few kind words for me in any little necrology, you may possibly deem me worthy of. My God! what could I have done to advance science in Australia and give it a practical and useful bearing in ~~a~~ new colonies, had I been left only with slender means in my creation, or had only half the sums, mostly squandered away, since I left (and largely interest) been at my own command.

And now, good bye, dear Dr Gray, and may providence watch over you also in future, as it protected you on the brink of an abyss lately, and let no clouds darken your bright career, such as obscured mine.

Ferd. von Mueller

for daily abomination around me? How could Hooker be Gov. Botanist of England out of Kew? Your comparison to Bentham does not apply. He was the heir of Jeremiah Bentham's fortune, while I am utterly without property except some books & some instruments. He never held any official position, hence he could not feel the pangs of grief to be driven from it. He has no responsibilities of any kind, and I am daily overwhelmed with them in and out of Parliament!

Mueller 13/5/80.

Your kind letter of the 2 April reached me this day, venerable & generous friend, and afforded me the happiness to learn, that in unimpaired health you proceed with your glorious labours. Your thorough investigation of the Vottis will give you the best means to judge, what demarcations ought to be applied to that great genus. I still maintain against Bentham & J. Hooker,

that it ought to be extended to Olearia, as R Brown also thought.*)

You still, dear Dr Gray, have not a clear view of my position here, which is not so very ~~our~~ official priving, as your obligations were strictly defined to Professorial duties. But my position is as multifariously responsible as Hooker at Kew, indeed in this clime more so, and if I was merely to work on dry plants, my Department would soon be stuck from the Budget, as not one among a thousand Australian Colonists cares about Phytography, but hundreds and of the thousands demand ~~from a~~ guidance & experiments in culture, in this new colony. So an unauthorised word in public journals can have the sequence of annihilating my Department and therewith depriving me also of the Library & Museum! I am sure, you cannot wish that! Now, how can I do justice as Gov. Botanist, if I have not my living plants (grasses, timber trees, paddy herbs &c &c)

*) Gray gives here your opinion

though the helplessness of my position and the degradation of my Department has never been felt so keenly by me than now, when the great Exhibition is approaching! The garden of Melbourne is positively shut to me, even if it had not been largely turned in to Lawn & Ribbon plots!

It is very thoughtful of you to send me your series of lectures. They will be glorious. Probably I get them to morrow with the parcels. Will send you in return prints of the lecture on what the Clergy had done for the natural Sciences. Ever your affn. von Mueller

He has his fixed income from save property. I am utterly dependent on my salary, which is not fixed, which must be revoted annually, and may at the caprice or ill-will of any Minister of the Department be left out on any annual budget, if I cannot show practical work, out of which rural and technical colonists can make a living. Besides it is not a high-minded man or even one of education,

who followed me in my Departmental position, took my House from me, my laboratory, apparatus, irreplacable of plants, rates and staff; it is a person who glorifies himself daily on my expense, with my treasures at the utter suppression and ruin of my position!

No, Dr Gray, when Dyston wanted to drive Hooker out of Kew, I wrote to our friend, "Keep Generalissimus!" The wisdom of that the Kew Director has recognized, though he in dismay was on the point to tick only to the Museum.

Moreover my phthisis taint requires me to oxygenate my blood well, by exercise in the open air, which I got in the Garden daily, while now, deprived almost of all help, I have to keep very long hours in the office and study, so that tuberculosis is are to get developed as it was finally with Harvey. However I feel a little better, than when I last wrote,

nature would give us in ages back again the Dodo, the Moas, the extinct plants of St Helena and other bygone organism, even of the simpler types.

It is good for mankind, for our earthly happiness, that we cannot penetrate to the greatness of godlike powers by any human investigations. But a religion, built on observations on the beauty & wisdom displayed in nature, preached in churches of her own or in the free gods world, would

Whitsunday 16/5/80.

Since writing my first letter for this mail to you, revered friend, I have received the volume of the two lectures, which you so considerately presented to me. These discourses are worthy of an Asa Gray; the thoughts & the languages are equally powerful in these discourses, and the views of the science of the day are blended with deep religious persuasion.

much will we and the next generations yet have to learn, before the history of the body creation will be revealed to us, though the origin and nature of the godlike vital force will be concealed for ever to mortal eyes! To discuss the great questions of these essays of yours with so great a man as yourself is not within the scope of a letter, even if a younger and (far) less authorative observer dared to express himself freely on the subject. And this I might venture to say, that the so called proto-plasm is to my view not an uniform substance through the great empires of living beings, and that the present creation does not entirely comprise forms of higher perfection but many of less development than those of the past, both animal and vegetable. Nor do I think it possible that the present plants & animals in their marvellous diversity and conspicuousness could have spring from one or few types, and I feel satisfied, that no efforts of mechanical

changed in the long
since diverse began
to record its observations!
I fancy that it is
God's breath as well
in us human beings
as in the simplest of
organism, which gives
vitality. Under the ordi-
nance of such a ruler
we may rest secure,
that we are watched &
may anticipate a happy
futurity, of which Religion
gives us an earthly
forethought. And why
should we poor mortals
~~narrow~~ try to narrow
God's creative power on this
atom of the world down
to a primordial germ,
without support and
evidence.

greatly elevate the
spirit of those, who
cannot cling to crit-
ical revelations.
Homo sapiens remains
after the study of
thousands of years
an unalterable species;
and I feel convinced,
that in the same
manner other true species
move within defined
absolute limits, but
our observations are
as yet far too scanty
to ~~define~~ delineate their real specific
boundaries; that will
be the work of coming
centuries. Herbert's early
observations on the ~~fer~~
fertility of hybrids

when extended will give us many a new insight also into the value of specific forms, now often kept very apart. I rejoice to understand from your discourse, that you do not deem the mere idea of selection sufficient to account for the development of higher organized from lower creatures. How could any one from a medical point alone! To my mind we must grasp the question of the creation of organized species from considerations of the <u>whole creation of the universe</u>. ~~How~~ Could the eye of the mere housefly with its thousands of lenses & optic adjuncts gradually originate by evolution? And even if so, which I do <u>not</u> believe, is not our world of organisms, wonderfully varied as it is, a mere speck in the universe, with worlds without ends? Must not the grandest planets ~~origi~~ with their own originate from the same godly power, which called forth the wonderous optic apparatus I inserted, neither the one nor the other having

Can we not in religious
belief concede to the
supreme power the
might of calling forth
distinctly the organic
species? The primor-
dial germ, if such
exists, must be the
most earthly marvellous
of wonders anyhow,
to be capable to develop
in hundreds of thou-
sands of species, easily
recognized & classified
even by our human understanding
It must be a great
consolation to you, dear
& honored friend, that
after the toils of en-
quiries through a long
life you can still

like Brewster and so many others of the wise, cling to the comforts and assurances of religion!

Ever yours

Fredrick Mullins

to anyone, when
chance offered. The
life is so sorrowful
and prosaic, that any
little poetic exhilira-
tion or other rational
pleasure should not be
missed. When (yesterday) in the
course of an ex-tem-
porè (impromptu) speech on several
subjects I referred to
Longfellow, Orion &
our Courts from the
Presidential Chair, this
passage of my re-
marks was received
by all the active sin-
ging members of the
Liedertafel with par-
ticular pleasure (applause).
Regardfully yours
Ferdinand Mueller

27/3/82.

The telegram has
just reached us, dear
Dr Gray, that your
illustrious compa-
triot Longfellow is
dead. At his venere-
rable age he being
called away into eter-
nity, does not take
anyone by surprise;
still the whole world
of educated and high-
minded people will
be sorrowful at the
loss of so great a
man.

When presiding last night at a fête of the "Lieder tafel" I took occasion to mention, that I had begged of you, to send the program of the Concert, in which Mr. Niedé's musical version of Longfellow's Orion was first played, to your compatriot with an intimation, that the music should follow as soon as it was published or a manuscript copies for all the needful instruments could be written out. The latter to receive, and (as I thought) to hear performed in a great American City, the Poet did not live; but we here hope, that he derived some little pleasure of learning, that at the antipodes one of his great poems had been first expressed in musical voices. I had nothing to seek in offering the program; but throughout life I have sought to give some little joy

29/10/82.

Let me express my best thanks, dear Mr Watson, for your goodness of sending me your important additions to the N. Amer. Flora, as recently published by the American Academy of Arts and Sciences. It is pleasing to see gradually thus the whole vegetation of your grand country descriptively elucidated.

The enclosed print of a [illegible] lecture of mine may interest you, as I alluded also to the N. American plants.

In a few weeks I hope to send to your University and also to the Academy the first volume, containing all the Naucrlases, of my Genera of Australian plants species. Could not something similarly be done for the Flora of the United States? A proof-sheet herewith

Regardfully your
Ferdinand Mueller.

Tell me, kindly what works of mine the University and the Academy possess, so that I may complete the series for the respective Libraries. There, as far as that can yet be done

As you are so much in communication with Mexico, could you kindly help me in finding out, which Oaks furnish the best timber and tan, which Pines the best building wood and resin and any other information regarding vegetable technology of Mexico? I want very much these data for a new edition of my volume on other plants for industrial culture. Could not also a N. Amer. edition be brought out? It ought to sell extraordinarily and I would revise it for N. Amer. and give the right of publication gratuitously.

Muller

25/8/88

In sorting out plants into the great divisions, it is now quite a comfort to me, not to be troubled with the Monochlamydeae. Two European University-Professors sent me lately a Polycarpaea each as a Gompharena. This is very pardonable, but shows, that a system cannot be in all respects natural, which keeps Caryophyllae near the commencement of Dicotyledoneae and Amaranth. near their end.

The „Genera", dear J. Gray, is to serve multifarious purposes; here as an index to the Australian portion of my museum, as a framework of a new flora &c. &c. Allow me also to remark, what I have done already in a former letter, that since nearly 20 years I have no longer kept the Monochlamydeae (or as now unnecessarily called Incompletae) together,

that I implored Bentham & Brooks when they commenced the "genera" to do away with that unnatural portion of the Linnean system, changed by L. from Vegetalia to Monopalamydae, to which a leading the answer was, that L's system must be adhered to in its entirety, because it was every where in use! According to that, also Linné's system should have never been abandoned. The Monopalamydae may still drag on till the end of the century, but will not likely be maintained far into the next secular epoch! I need not mention to an leading a naturalist as you are, to what extremity B. & K. are driven, by being obliged to place artificially the Loriomtharae into the Monopalamydae

Pardon me, when I re-
mark, that from the
very commencement
of my using the nat.
system, more than 40
years ago, I felt that the wor-
thy Polypetalae and
Monopetalae are mis-
nomers, as in the great
majority of cases their
flowers are oligopetalous.
The terms Choripetalae
and Sympetalae are used
with me in 1866, long
before Eichler, who how-
ever was not aware of
this fact.
Jackson in his „guide"
writes also Linné.
I write Linne.
have nearly all L.'s works
but not the three „Flora"
so that I do not know,
how L spelled his name
in his native tongue

The current 70 to show [illegible] that the end e is [illegible]

I see however in my library, that Schreber's edition of the Materia medica in Latin (1773) says Caroli a Linné mat. med. as he was a disciple of L., this ought to be an authority. In Germany I never saw L.'s name otherwise written; indeed not only Brockhaus writes it so in the Encyclopaedie, but also Chambers in the English Encyclopaedia. It seemed to me best to adhere to one mode of spelling the names of Botanists thus I kept to l'Ellise Book or

[illegible]

It is with deep sorrow, that I hear of Mr Bentham's failing health. after some repose he is likely to become invigorated again, unless some form of organic disease set in. We shall miss that great man all very much, after he passed away; my wish to meet him once in life will not likely be realized. The use of the seeds of Abrus in Pannus and Trachoma will interest you much, as it depends on a bacterian

fermentive prin-
ciple, and empir-
icides so much more
rationally and controlably the use
of other inflammatory
secretions, such as even the
antiquated bilimor-
bhacal. Some of the
Australian Olearias
are almost herbaceous,
for instance O. ciliata.
at best the woody
stem could as little
be generic as in Senecio
& numerous other Australian and extra-Australian
Composite genera, so
far as I venture to
judge. Let me hope
that you are now quite
well again and, with
ease and happiness
continue your glorious
researches. Regardfully your
sincere friend

I admit, that a difficulty exists about the term Calyxes, especially as long as we have not yet settled the value of Lodicules &c in Gramineae, unless we adopt implicitly the views of Kathel. But to call the floral <u>lobes</u> of Orchids, Amaryllidae &c sepals and petals, is utterly inconsistent to calyx-lobes and petals in Rosaceae, Myrtaceae &c

24 Jan 1883

not all orders are represented in Australia; but I do think, that I have for the first time given to Elatinaceae, Plumbaginaceae, Plantaginaceae and some other their exact systematic position. The Curcubitaceae are all inseparable

Habit does not bear Cucurbitaceae to be brought near Compositae, both gamopetalous. The grand climber, Senecio scandens, covers many a wall or bower here. Acanthoriza aristata horrida is an almost leafless but spiny bush. In glomerate of some Lobelias are smaller than larger than those of many Compositae (Cynara Scolymus &c) In contrast given by me to Orders cannot be applied to all other countries, as

first (1682) used the terms Di- and Monocotyledonae. Hence I put them that way in the "Genera".

Could you not give us a Genera for the U.S. as a precursor and facilitator of a new universal flora?

26/2/84.

Let me thank you, dear Prof. Gray, for your kind remarks on D.C's last publication concerning nomenclature. I had written some notes for the Botanisches Centralblatt soon after receiving the work from M. Alph. de Candolle himself. I may be induced to write still further on the subject, but on this

occasion I would merely remark, that I agree with you on nearly all points. You have however overlooked one important moment in regard to the special case of Stylidium, Utricularia and Candollea; it is this: Utricularia absorbs Candollea; so we would still need a genus for the great name of L.C., and where is the fixity without priority? Stylidium is for this a good instance to point to.

Let me hope, that in serenity of mind and firm health you continue your great labors.

Regardfully
your
Fritz Müller.

I have only Hays method in the second edition, but on enquiry in Europe I was told, that he already in the

25/3/84

In the publication of the R.S. Linnéan Society of New South Wales, dear Professor Gray, I have given notes on Linnaeus name from a recent communication of Prof. J. Agardh of Lund. The great Naturalist wrote his name himself Linné, after he was ennobled by the King of Sweden, even putting it thus on the title

page of some of his last printed writings. In Denmark and Germany it is always written Linné from my own knowledge, and I believe the same is the case in most European states.

Regardfully
Your
Ferd. von Mueller.

from deep seated bronchial inflammation, have become much debilitated and only just now gain a little appetite once more, though the cough is not subdued. My parents died early of phthisis, and all through life I have suffered from lung-affections. My work, during this winter had ill news got into some arrears; and if I at all get well again, I must make up for lost time.

16/4/84

An irreparable loss indeed, dear Professor Gray, that of Dr Engelmann! So the last of the illustrious four ~~has~~ is gone, who studied so close friends together on a German University, Schimper, Alex. Braun, Agassiz — Engelmann. We all, not so very long ago, admired his active field work in the interest of forest-conservancy.

not without our misgivings as to his overtaxing his bodily strength at so venerable an age. I hoped, he would follow the trend in longevity! It is not so very long ago, since I had from him a letter concerning a very abnormal form of Cocoanut australis, which I had sent him. Perhaps you will do me the kindness, when writing to his son, to express my condolence. Your elaboration of the vast mass of Palmer. Compositae must be a grand piece of work, thorough and masterly, like all you do. It is most kind of you, to invite me to the Association in Canada, and your own in Philadelphia and one of the greatest joys of such a tour would be to shake hands with you! I sure also I have now 7 months suffering

I find this caused much delay.

I may however some time later slip over for a short itineration in N. America, and hope then to pay you personally my homage.

Bentham wrote me a touching farewell-letter a few months ago, stating that he never could hope to resume work. Alas! That he should be such a sufferer at the late evening of his life, when we hoped that he at all

ements would in happy contemplation of his own gigantic achievements watch also calmly and joyfully the progress of our discoveries. He must feel very lonely also now towards the end of his illustrious career, having no one of family ties to cheer him up.

Let me hope, dear Dr Gray, that your health, and also your serenity and vigor of mind will remain long unimpaired.

Very regardfully yours Asa Gray

I will send the two missing parts of the Euta Cryptography.

Lastly a new arrangement has come here into force, by which Gov. publications are distributed through the Premier's Office.

8/9/85

Again I have to thank you, dear Professor Gray, for spending some generous praise on one my works, this time what may be the last part of the Eucalyptography, - for altho' I have most plates ready for another decade, I may not live to finish it, as my health is so vacillating. Had I continued in my garden to live and to be among my trees, also the Eucalyptography would have been a still ampler volume, altho I looked on Eucalypts in Conservatories and Herbariums since 1840, and on them in Australia since 1847.

By the end of this year I hope to issue 80 quarto plates of fully original; but the text will not appear in 1885, as I am also so much engaged for the forthcoming great Colonial Exhibition in London officially. However the volume will be sent to you, so soon as it is out. Can I do for you anything particularly?

Let me hope that you are happy and well.

Regardfully your

Ferd. von Mueller.

29/9/87

Herewith, my honored and venerable friend, I beg to send some uncorrected proof-pages of part I, "Key to the system of Victorian plants," which work is now completed in MS., and will likely be in October through the press. The method of Lamarck was for this impretentious little book not adopted by me voluntarily, but chosen on particular request of the Vict. Field-Naturalists Club, of which I am the Patron. When in a few weeks you will receive the complete volume, you will be in a position, to see, on what plan I was working throughout.

The usual treatment is two-fold: 1, abolition of all terms used in human anatomy and theme in zoology; 2, supportive notes to each positive characteristic in the dichotomia.

The greatest difficulty I encountered was in choosing such course throughout as would not break the chain of linear affinity. The innovation, albumen tum "rests on a good classic work, and separates the albumen of seeds from that in chemistry and human physiology. The elder Sl already called the vegetable placenta "placentarium"; and I believe, you as a medical confrere will approve of calling the fibro-vascular tract in leaves by one name, instead of three, as neither ribs nor nerves occur in plants.

"Venules" seemed the best, as venulet is an expression also in medical science. The great vena cava, vena portae stand, you are well aware, to the smaller veins quite in the same relation, as the "midrib" in leaves to its "secondary and tertiary venules". Here I was in a particularly favorable position, to make these changes, because I have to work and labor here in this remote corner of the world, de novo" for the beginners, and can thus without moral restraint and traditions, some from Plinius time, strike a new course.

That I have placed the Thymeliae next to Rosa ceae will doubtless meet with your approval; indeed that seems to me ~~the~~ their only possible position: you are aware, that I am "conservative", and that I have not made these new

alterations in either terminology or systematology ~~either~~ rashly or at caprice. If from your unmeasurably rich store of knowledge you can afford me enlightenment on preferential position of orders, I shall be greatly beholden to you, and I can utilize such remarks then — if divine benignity will spare me yet a little longer for my worldly career — for likely subsequent editions of this little book.

Regardfully always
your Ferdinand Mueller.

I think you received part II of the "Rey" already with the xylographic illustrations and the systematic enumeration and geographic notes

14/10/87.

In sending more proof of my poor "Key", dear Prof. Gray, you will see, that I had some misgivings in retaining the name Geranium Carolinianum, and thought it safer, to return to the original specific appellation of G. pilosum for the widely distributed Australian plant. Here it is never annual, simply perennial, as we have no severe winter; but the exact position of several allied forms needs to be studied from American material; and altho' such is in my own collection, much through your generosity, and is also in London largely extant, it would be best, that American local experience ought to be brought to bear on the subject

Perhaps one of your many disciples would institute researches in this direction.

Ever regardfully yours

Ferd. von Mueller.

Can you kindly inform me, what is the exact position of the radicle of Sterculia Mexicana?

26/1/88.

When the centennial anniversary of the independence of the U.S. was celebrated, my honored and venerable friend, you wrote me a letter, which I treasure among my best epistolar possessions. Now it is my turn, to write you on the most memorable day of Australia, when the second century of its settlement is commencing! You wrote, that you would devote such a day of honor to correspondence with science-friends; and this sentiment I share

so completely, that I also shall devote this day to communications with the learned, who honored me with their friendship. I telegraphed my felicitation to Sydney, where I was invited; so I have done thus far my homage also on this grand historic occasion! —

Hardly any special question is before me, concerning which I should adress you, though thousands of objects interest us mutually, but could not be discussed by letter-writing.

I am grateful, that divine will has spared me, to live into the second century of Australian civilisation, and to witness what the energy and enterprise has of the British nation ~~has brought~~ accomplished so gloriously within such a space of time also in Her Majesty's Australian Dominions!

To myself only a very brief period of worldly existence can be left; but it is with some pride, that I look back now to the results of more than 40 years uninterrupted toil in endeavouring to advance the interests of these great southern lands, humbly though, in applied geography, rural developments and abstract science.

To the fullest extent do I concur with your view of the undesirability of superseding the first ~~and~~ ~~appropriate~~ name in a correctly chosen genus; it is one of the reasons for the chronology of Australian plants in the Census, to subdue that practice, to which Bentham even adhered yet in the earlier volumes of the Austral. Flora, to drag forward a name for a species wrongly placed before as regards its genus. On this and many other points, concerning the systematic key of plants, I am just writing an ~~essay~~ essay; and I dare not withhold any review of that work, until

Sunshine and Showers
Sunshine and Showers

horrors of the
Civil war of the
U.S., he wrote
on one occasion
the following
as the whole con
tents of a letter, ac-
companying a
sending. "Dear
Mueller, I am
distracted, but
I do not forget
you"! Asa Gray,—
and at the day
of your centenary
jubilee, he — strong
as good a patriot —

15/6/88

Your deep sorrow,
dear Prof. Watson,
is shared by me,
at the mournful
loss of our un-
replaceable friend,
Asa Gray! To you,
his "companion
under arms" for con-
quering the vast
fields of the Cosmos.
Flora, the passing
away of such a leader
must be particularly
sad; but his death

was one amidst the brightest honors and in unfading glory; and divine merciful providence spared him the pains of a long and lingering illness. I shall miss Aa Gray much! Our friendship became now clouded in the 30 years communications between us, and he seemed always to wish we should meet for once in life. Thus he invited me pressingly to the British Association's meeting, when it was held on your side of the Atlantic. Oh, but I could in my official departmental position at that grand occasion not make free the needful time. Even during the

Mem. Mr. Darwin's letter to Mr. Asa Gray, in which he mentions his intended visit to America.

will you be so
friendly, to express
my grief at such
a loss to Mr Langley
of the Smithsonian
Institute and
also my profound
sorrow of so illu
strious a leader of
his as Prof Spencer
Baird having
passed away also!

With deep
respects your
friend Mr Muller.
My letter of felicitation
written on Thanksgiving
day 1888 may yet have
reached Mr Muller, but I have not heard

prate to me,
"the Bretts are
"resounding the
"joy, but I gain
"a day for quiet work
"on my plants!"
Such expressions
are worthy of a true
son of science.
So I shall never
see his handwri-
ting again alas.
Hooker wrote me
30 years ago, "if
a batch of letters
came, and one
from Asa Gray

was among it,
that was always
first opened and
read. When in
1840 I commen-
ced my investi-
gations on the
Flora of the Western
portion of Schleswig
then Danish terri-
tory, to which my
friend Prof. Dr. Lange
particularly allu-
ded some years
afterwards (published
as "brevi-
arium ex") the
name of Asa
Gray became as
one familiar to
me. Now within
few weeks three
leading Botanists
of great renown,
who honored me
with their friend-
ship, have passed
away. Asa Gray,
de Bary, Planchon!
My condolence
will have been
conveyed already
to Mrs Gray through
Prof. Sargent;

In this sadness
fall rays of brightness through you being able to continue the great phytographic labours of Asa Gray in the spirit imbued from him! Vol. II of the Botany of California is already a monument of your masterly and extensive research May you be ~~[illegible]~~ spared to bring the great labours of your preceptor in his sense to a worthy conclusion. —

Yours truly
Marcus E. Jones

Mr. Marcus E. Jones
Woodside Utah

Mr. Marcus E. Jones
Woodside Utah

What would be the safest and least expensive means of sending such to be dried and expeditious. Your genuine remarks about the dichotomous key are highly appreciated by me. The complete work I hope to send in July and before that Orders IX – XIII of Asteraceae.

With regards pleasure
yours
Rudolph Mueller

If you allow me from long experience to offer a suggestion, it would be to this effect for the furtherance of the phytography of N. Am., that a statistic in a schematic form be published of all plants of the U.S. hitherto known without my "Synopsis" (which doubtless you have) I should really not be able to command the field over the scattered literature of the plants occurring as indigenous to the Dist. Columbia and record their regional or geographic distribution. What a boon to no Extra-American such a work would be! for rise easy remove.—

Could a system of interchange be initiated on a easy method between our museums of dried plants.

The more I study the matter, the more I become convinced that very extensive contributions of specimens are indispensable

New postal arrangements have come here into operation lately for the eastern hemisphere, through which the Victor. Sov. Frank-Stamps ~~carries~~ - under no longer the sending of letters & parcels free to any other countries but Britain & British India & some British Colonies.

But I believe
it does not affect
the ~~mostal~~ reciprocity
treaty between
the U.S. & Australia
or at all events
Victoria. Will
you kindly let
me know, whether
~~the~~ my letters
of late date have
come free there
yet, as — to all
my knowledge —
they have done
formerly

Please remember me to the excellent Prof. Freleuse & Sargent.

Regardfully yours

Ferdinand Mueller

Did you see the proof-slips of the Key, regularly sent to your Department or rather our lamented friend Asa Gray and after his death to Prof. Sargent.

14/10/88.

Allow me, dear Prof. Watson, to draw your attention to the fact, that (as you will soon see in the Key to the syst. of Vict. pl.) the Tuosiena, called by Mr Bentham T. repens in the Flora Austral. is the T. diffusa of Forskael, as I have found out.

It differs from the T. Asiatic v. repens L. in smaller flowers, in petals entirely yellow not largely white, in only diminutive natatory appendages and in some other particulars.

Now in all probability the N. American floating Isoetes is also identical with the African not the Asiatic species.

So it would be of interest, to reinvestigate this subject, for which you have probably ample material there. When at the Murray River in 1848 I saw already, that the Austr. sp. could not be identical with the Indian, and gave it then the temporary name I. australis under which it was distributed in my earlier collections

25/11/89

The Mexican plants, so generously sent, dear Prof Morton, are a most valuable addition to the collections here. I am indeed much beholden to you. I will write more fully after the meeting of the Austral Association for the advancement of science; we

are just prepa
ring for it. I
have the honor
to be President,
and feel keenly
the responsibility
also. Regardfully
yours
Rutherford B. Hayes

If we only think of the unnatural position e.g. of Salsolaceae, kept up one end of the Dicotyledonae, while Caryophylleae are near the other end! In Salsolaceae as we are all aware, are only less developed Curvembryonatae (or Amyliferae), just as Geldonaea in Sapindaceae,

6/5/90.

This day, dear Prof Watson, arrived the new edition of Gray's Manual, which you in conjunction with Prof Coulter and with the aid of local workers have been able to issue. It is a

worthy following up of your great preceptors work in this particular direction. I presume, you will gradually take in the cruciferous Cotyledonous, as you commenced to do with the Jungermanniaceae. You doubtless felt reluctant to make at once any great change in the systematic arrangement out of piety to old Gray, who in his turn was unwilling to depart from the sequence of the orders as received much from Jussieu by DC. — But you will concede, that a natural system cannot be perfect, so long as the Apetalae are kept as themselves.

long been eager
to examine its
structure myself.

Regardfully
yours
Ferd. von Mueller

If your aquatic
Nasiena had
the petals quite yellow
it will likely be I
diffusa, as the genuine
I. repens has the
petals white except
the base; that plant
has never yet been
found in Australia

Hohenwilla in
Rosaceae, Ane-
mone in Ra-
nunculaceae,
Glaux in Pri-
mulaceae &c &c.
Since the last
25 years I have
abolished the
monochlamydae
in all my writ-
ings as such,
and I can use
the "Genera" of
with far more
facility than the
"Flora Australia."

This day I have posted to Prof Coulter the "Contents", so that he may see my arrangement for an enumeration from the study of Australian plants since 50 years (if I include, what I observed from 1840–1846 on plants of Australia in European gardens.)

Perhaps you like to send to your Collaborator this letter, as it may lead you to consultations, whether the changes recommended by me, could be adopted for further editions of the Manual. Have you a specimen of Buckleya to spare? I have

Contributions are acceptable, but should be distinguished from the Manuscript.

7/7/90.

A few words, dear Prof Watson, as the monthly mail for America will be dispatched to morrow. I like to follow up some remarks formerly offered, about the advisability to distribute the Monoclamydeae among the other orders, gymnosperms only remaining apart

Kingdom and the Phanerogams

are jointed with the calyx, altho' the latter may be reduced to almost nothing as in some Rhododendrons, Astrolaria, Diplolaena &c. I like you and Prof. Coulter to consult about this subject, not because it is my view, but because we all must strive from different material to complete a truly rational system of affinities. You both have the "Second Genera" and "Key"

Protaceae*) and so also Loranthus are undoubtedly petaliferous. In Australia exists a Loranthus, my L. odontocalyx, which has very conspicuous denticulation of the calyx, indeed the latter is five lobed, the lobes of course continuous with the tube. moreover the petals of all these plants

*) I mention this long ago in great detail, but I adopt Hooker's view, yet more strongly, will also observations, will [illegible] to the contrary.

Since 25 years I have done so here, and we cannot have a complete natural system, unless this is done. You will not deem me intrusive, when I say, that I speak from ~~an~~ independent experiments of my own during 50 years! As a mere instance in support I may mention, that

[illegible]

24/1/91.

On my return-voyage from New Zealand, dear Madam, where I had by the rules of the Austral Association for Advancement of Science to install Sir James Hector as my successor in the Presidency, I avail myself of spare-hours for correspondence, and as the genial Professor Goodale, to whom I mentioned two remarkable passages from letters of your lamented Consort desired me to ~~transcribe~~ communicate them to you, I feel it a particular privilege to do so, ~~although~~ tho' I write only from memory.

The one passage ~~occurs~~ constituted the whole of a letter, written to me at the time of the dreadful civil war, when the arms of the Southern States were in the ascendence. Thus he wrote: "My dear Dr. Mueller. "I am distracted, but do not "forget you, and now send "you a parcel of plants from "Texas" Yours Asa Gray.

The other letter, to which I refer, was also of laconic but significant briefness: "My dear Baron: This is the "Centennial day, and in the "streets it is noisy joyous, but "I get a quiet day for my work." This shows with what close application your renowned husband devoted himself to science-considerations.

Prof. Goodale's presence at the N.Z. meeting of the Australian Association shed a great lustre on it. In my short opening speech, referring to the American president, I paid him ~~the~~ homage for having crossed two oceans to bring us a greeting from antipodal distance of your great Science-Union, and added, that the highest praise, we could bestow on him, was to recognize in him the successor of Asa Gray!

Ever, dear Mrs Gray, yours with profound regard

Ferd. von Mueller.

It was so kindly thoughtful

of Prof. Asa Gray to invite me specially to the American Assoc. meeting, when he was Presiding Officer in the administrative Department of Victoria. Never vacation-time arrives, and as I was then extra-taxed also with unusually heavy work I could not make the needful time free, and thus one of my greatest worldly wishes to meet Asa Gray, remained unfulfilled. When I think of him, I like to express myself in slightly altered words of Caroline Fichler, written at the time of the death of Koerner: a companion under arms in 1813 of my father. Also stand we forever Wilfried Fojnar, Wiesbaden, nurse

Inserted on page 1

28/5/91

Dear Prof Watson,

Yours the 20th inst. in not sending you a complete impression of the second Centuria of "Austr. plants". This is now done by the mail. The printing fund was insufficient, to furnish a preface and addenda; but a supplement is likely to appear at the end of this year with named species

genera (like Hybanthus, Virania, Hadrianiomeda) are simply misused, and not intentionally passed. If such well established genera are left unattended to, where are the exceptions to commence and where to end? Fixity of dual names can only be attained by adopting in all cases the first binary name within a correct genus!

With regards & remembrance yours

Ferdinand Mueller

I do not altogether
concur in your
views of change
in systems and in
genus of plants.
The subject is too large
to discuss it in
a letter. You may have
read Wonders my
treatise thereon, wrt.
in 20 years ago for
the transact. of the
Ind. of N.S.W. also the
preface to the first
Genera. I may hence
give some few
instances, to illustrate
my own ideas.

Two European Professors sent me 2
species of Polypor-
aceae as belonging here
and yet the
spiral tarsae are
kept near one end
of the system and
the Carpophyllea
on the other. If I be
overworked Mikie
of Nepal, who quoted as proof a name!
Minnesota —
blishing Malcolmia,
it was a mant of
care, particularly at
that time, when but
large libraries were
not large. If he wil-
lingly passed Scopoli's
genus it was a grave
injustice.

regards. A second (continuing) lot of woodblocks is under preparation for him. I hope you received for Prof Goodale all rightly as well the wood-implements as the imitation-books.

With regardful remembrance

your Ferdinand Mueller

13/6/91

The latest set of Mr Pringle's plants have just arrived, dear Professor Watson, and I merely now write to acknowledge the receipt of them in good state of preservation. Just at the eve of the departure of the American mail, it is too late to take

out a money-order for the £5.— which this set costs, but I will send the payment by the next mail. I had hopes, that Mr Pringle would have ascertained something about the value of the timber and tan-bark of the oaks, which grow in the district through which he passed; but he has hitherto sent me no notes in this respect, which to obtain no great difficulty should exist. I had a very kind letter from the excellent Prof. Goodale at the moment of his leaving Japan. So he has perhaps arrived at his home again, when this letter reaches you. Pray give him my kind

Private

I have often wondered why Australian researches come so scantily into recognition elsewhere. In the Pflanzen-Familien many important data thus far are omitted, e.g. in Restiaceae, fossil Coniferae &c. &c. When P & A. commenced their genera I strongly pleaded for the abolition of the Nymphaeaceae already.

10/7/91

Allow me, dear Prof Watson, for the second time, to send payment through you to Mr. Pringle also for the new set of Mexican plants, lately received; and be so kind, to sign and return early the enclosed receipt, so that the auditor, which I made out of my private

you kindly any addenda to suggest for the new edition of the "select plants" from regions, traversed by you? I adopt now the genus Serenoa. Pray, bid my best greeting to the genial and generous Prof. Goodale!

With regardful remembrance yours Ferdinand Mueller

means, may be in an inroom
come refunded to me at the Gov.
Treasury here, which
can only be effec-
ted by a receipt
of this kind.
I am in a pix
about Pinus
~~p~~ resinosa. I
can find no data
about the ~~grass~~ stem
diameter. London
gives it only at 2.
Nuttall's ~~copy~~
work I have only
the Illustrated edition
which contains only the
leaves, twigs & cones.
Could you have
the kindness to
send me a
complete copy. Macrum
gives only localities.
Have I overlooked
any important
publication,
referring to trees
of the Eastern States
of N.Am.? On the
Western States much
literature so far
as extant and accessible to me
I hoped
Mr Pringle would
have gathered for
me some original
notes on timber
and bark of Mex-
ican oaks. Have

80-150° x 2-4½°